

Development Aid for Fisheries in Africa: Setting out Key Principles for Fisheries Governance Reforms



NEPAD

A PROGRAMME OF THE AFRICAN UNION

NEPAD Planning and Coordinating Agency
Agence de Planification et de Coordination du NEPAD

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International Partnership for African Fisheries Governance and Trade (PAF)



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Acronyms and Abbreviations

AfDB	African Development Bank
AGS	Accelerated Growth Strategy (Senegal)
BADEA	Arab Bank for Economic Development in Africa
BID	Islamic Development Bank
BMU	Beach Management Unit
BSF	Belgian Survival Fund
CAADP	Comprehensive Africa Agriculture Development Programme (NEPAD)
CAS	Country Assistance Strategy (World Bank)
CFAF	Communauté Financière Africaine Franc
CIDA	Canadian International Development Agency
CS	Country Strategy (EU)
DAC	Development Assistance Committee (OECD)
DANIDA	Danish International Development Agency
DFID	Department for International Development (UK)
DFR	Department of Fisheries Resources (Uganda)
DoF	Department of Fisheries (Ghana)
DSIP	Development Strategic and Investment Plan
ECA	East Central Atlantic
EEZ	Exclusive Economic Zone
EPA	Economic Partnership Agreement
EU	European Union
FAO	Food and Agriculture Organisation (United Nations)
FFP	Fund for the Promotion of Fishing
FMP	Fisheries Master Plan (Mozambique)
FSCBP	Fisheries Sub-Sector Capacity Building Project (Ghana)
FSSP	Fisheries Sector Strategic Plan
GDP	Gross Domestic Product
GEF	Global Environment Fund
GIRMaC	Integrated Marine and Coastal Resources Management Project (Senegal)
G-JAS	Ghana Joint Assistance Strategy
GNI	Gross National Income
GPRS	Ghana Poverty Reduction Strategy
IBRD	International Bank for Reconstruction and Development
ICEIDA	Iceland International Development Agency
ICFG	Integrated Coastal and Fisheries Governance
ICR	Implementation Completion Report
IDA	International Development Association
IDAF	Integrated Development of Artisanal Fisheries (Ghana)
IFAD	International Fund for Agriculture Development
IFC	International Finance Corporation
IFMP	Integrated Fisheries Management Report
IIP	Instituto Nacional de Investigação Pesqueira (National Fisheries Research Institute)
ILMP	Integrated Lake Management Project
IMF	International Monetary Fund
INFOSA	Marketing Information and Technical Advisory Services for the Fisheries Industry in Southern Africa
IPIC	International Petroleum Investment Company
ITQ	Individual Transferable Quota
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unregulated and Unreported Fishing
JICA	Japanese International Cooperation Agency
LAFC	Local Artisanal Fisheries Council
LEAF	Lake Edwards and Albert Fisheries
LVEMP	Lake Victoria Environmental Management Programme
LVFO	Lake Victoria Fisheries Organisation
LVFRP	Lake Victoria Fisheries Research Project

Acronyms and Abbreviations (continued)

MAAIF	Ministry of Agriculture, Animal Industry and Fisheries (Uganda)
M&E	Monitoring and Evaluation
Med	Mediterranean Sea
MCS	Monitoring, Control and Surveillance
MOFA	Ministry of Food and Agriculture (Ghana)
MSY	Maximum Sustainable Yield
NDP	National Development Plan
NEPAD	New Partnership for Africa's Development
NFAP	National Fisheries and Aquaculture Policy (Ghana)
NFP	National Fisheries Policy (Uganda)
NGO	Non-governmental Organisation
NORAD	Norwegian Agency for Development Cooperation
NPOA	National Plan of Action
NRP	Pirogue Registration Programme (Senegal)
OD	Official Development
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
OFCE	Overseas Fishery Cooperation Foundation
OOF	Other Official Flows
OPEC	Organisation of the Petroleum Exporting Countries
PAF	Partnership for African Fisheries Governance and Trade
PAPA	Plan of Action for Food Production (Mozambique)
PARPA	Plan for the Reduction of Absolute Poverty (Plano de Acção para a Redução da Pobreza Absoluta)
PEAP	Poverty Eradication Action Plan
PERC	Property and Environmental Research Centre
PES	Economic and Social Plan (Plano Económico e Social)
PESPA	Programme for the Development of Small-scale Fisheries (Mozambique)
PFMP	Participatory Fisheries Management Programme
PGDPP	Sustainable and Joint Fisheries Management Project (Senegal)
PIU	Project Implementation Unit
PLAID	Project Level Aid
PMA	Plan for Modernisation of Agriculture (Uganda)
PPABS	Sofala Bank Artisanal Fisheries Project (Projecto de Pesca Artesanal no Banco de Sofala)
PREF	Economic and Financial Recovery Policy (Senegal)
PROFISH	Programme for Fisheries (World Bank)
PRSP	Poverty Reduction Strategy Paper
RFMO	Regional Fisheries Management Organisation
RPOA	Regional Plan of Action (FAO)
SADC	Southern African Development Community
SEA	South East Atlantic
SIDA	Swedish International Development Cooperation Agency
SOFIA	State of Fisheries and Aquaculture (FAO)
SFLP	Sustainable Fisheries Livelihoods Programme (FAO/DFID)
SSA	Sub-Saharan Africa
SWOT	Strengths, Weaknesses, Opportunities, Threats
UJAS	Uganda Joint Assistance Strategy
UN	United Nations
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
WARFP	West Africa Regional Fisheries Programme (World Bank)
WB	World Bank
WSSD	World Summit on Sustainable Development
WIO	Western Indian Ocean

Foreword

The Comprehensive Africa Agriculture Development Programme (CAADP) was endorsed by the African Heads of State and Government in Maputo, Mozambique in 2003 as a framework for agriculture-led economic development. In 2005 the African Heads of State and Government endorsed the New Partnership for Africa's Development (NEPAD) Action Plan for the Development of African Fisheries and Aquaculture in Abuja, Nigeria. So far twenty-one (21) African countries have finalised their CAADP process and have signed the CAADP Compacts, many of which have identified fisheries as one of the key drivers of agricultural growth.

These countries are now formulating their National Fisheries Investment Plans, which are aligned so as to optimise the contribution of fisheries to the CAADP target of 6% annual growth in the agricultural sector. Another performance indicator is the need for countries to allocate 10% of their national budget towards agriculture. While many countries have tried to attain the 10% allocation target, most still rely on donors to complement their budgets. This study therefore aims to assist African countries and their donors to optimise the allocation efficiency of fisheries aid.

The study is derived from the joint NEPAD Agency-World Bank study entitled *African Fisheries Development Aid*. A comprehensive report entitled *The Political Economy of Fisheries Reform: Lessons and Applications for Development Assistance* was published by the World Bank in which a chapter, African Fisheries Development Aid, focussed specifically on Africa. This report expands on the chapter by including case studies which were conducted in Ghana, Senegal, Mozambique and Uganda.

The NEPAD Agency's fisheries development efforts are realised through the International Partnership for African Fisheries Governance and Trade (PAF). PAF is providing the impetus for a turn-around in fisheries management in Africa. The programme has kick-started reforms which are urgently needed in African fisheries governance in order for the continent to realise the full potential that fish can have on sustainable development. PAF is a NEPAD flagship which, I believe, will assist Africa to achieve a sustainable reform process that will have a direct developmental impact on fish-dependent communities. However, for us to achieve this, we need to open the policy space to ensure wider participation in policy development and implementation by fishers, fish farmers, traders, consumers, as well as non-state stakeholders. Over the past years of PAF implementation, we have learnt that policy design is meaningless unless we bring strategic engagement to the countries and begin to design, test and validate practical processes for fisheries policy reform. We have also learnt that these processes must be based on key principles and empirical evidence which are informed by best practice and agreed upon by the majority of fish stakeholders. This report is part of the process of building compelling evidence for the need for reforms in fisheries policies and governance structures.

The report is further testimony to the quality of partnership which the NEPAD Agency has developed within and outside Africa. With the financial and technical support which we have received from the United Kingdom's Department for International Development (DFID), we have built PAF as a critical support system for our member states. Through our partnership with the World Bank's Global Programme on Fisheries (PROFISH), and its global research under the theme *Currents of Change*, we are generating valuable political economy knowledge, which will be critical in informing policy and governance reforms in our member states fisheries sectors.

I am convinced that, in partnership, we will overcome the current challenges facing the African fisheries sector, turning it into an **economic asset** with the potential to generate and sustain substantial wealth for Africans.

Dr Ibrahim Assane Mayaki
Chief Executive Officer, the NEPAD Agency
Former Prime Minister of Niger

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Much of the theoretical background to this volume was derived from the forum which was held at Big Sky, Montana, USA from 7-9 May 2009, and jointly sponsored by the Property and Environment Research Centre (PERC) and the World Bank. The experts at this forum are acknowledged for their time, talent and knowledge of marine fisheries and the political economy of natural resources-based reform.

Credit goes to Steve Cunningham and Arthur Neiland for commissioning the case studies, directing the workshop in Accra, Ghana (22-23 June 2010) which synthesised the key lessons in this report. Alabi Bortey from the Ministry of Food and Agriculture in Ghana and Francis Nunoo from the Department of Oceanography and Fisheries Sciences at the University of Ghana compiled the Ghana case study. Fiona Nunan from the International Development Department, University of Birmingham and Rhoda Tumwebaze from the Uganda Fisheries Commission, conducted the Uganda study. J.Tenreiro and A. Menzes compiled the case study on Mozambique, and Boubacar Ba wrote the country case study on Senegal. All these authors are gratefully acknowledged for their contribution to this report.

Michael Arbuckle (Agriculture and Rural Development Department, World Bank) prepared the terms of reference for this programme and assisted with the development of the report as an input into a wider study on the political economy of fisheries reform. Tim Bostock, formerly from DFID and now part of PROFISH, is recognised for his technical guidance to PAF and the process of the study which produced this report. Sloans Chimatiro provided the linkage between the PAF and PROFISH, including strategic guidance on the critical priority areas of the African fisheries sector.

The NEPAD Agency gratefully acknowledges DFID for its generous financial and technical support for PAF.

Executive Summary

This report is part of a collaborative global study between the NEPAD Agency and the World Bank entitled *The Political Economy of Fisheries Reform: Lessons and Applications for Development Assistance*. The NEPAD Agency's PAF, Fisheries Governance Working Group and the World Bank's PROFISH worked together to draw up lessons aimed at informing the architecture of the donor support to African fisheries development.

Within the CAADP process, African countries are aligning their National Fisheries Investment Plans to optimise the contribution of fisheries to the CAADP target of 6% annual growth of the agricultural sector. Another performance indicator of CAADP is the need for countries to allocate 10% of their national budget towards agriculture. While many countries have tried to attain the 10% allocation target, many still rely on donors to complement their budgets. This study aims to assist African countries and their donors to optimise the allocation efficiency of fisheries aid.

The comprehensive NEPAD Agency-World Bank report mentioned above was published by the World Bank, and the chapter African Fisheries Development Aid specifically focussed on Africa. This report expands on the chapter by including case studies which were conducted in Ghana, Senegal, Mozambique and Uganda. It further presents the findings of a research project which examined the relationship between international aid and fisheries in Africa. There were three objectives, namely:

1. To examine the nature and performance of fisheries development aid in Africa;
2. To identify and analyse the key issues involved;
3. To derive lessons for the future use of aid in fisheries.

The findings were used to provide a basis for producing a set of key principles for fisheries aid, along with a good understanding of how they might be used to best effect in the future, particularly by influencing organisations, such as international donors and agencies, government ministries and public organisations, and also the private sector, which are concerned with allocating and using fisheries aid.

Using data provided by the World Bank, the study found that African fisheries have received substantial aid (US\$4.6 billion between 1973-2001) and that, in their own terms, many fisheries aid projects have been considered to be successful. Yet the most recent United Nations Food and Agriculture Organization (UN FAO) State of Fisheries and Aquaculture Report (2008) suggests that many fisheries in Africa, and indeed in the world in general, are characterised by weak management systems and threatened by over-exploitation, which has gradually worsened since 1974. Project-level success therefore seems to go hand-in-hand with fisheries failure.

The case studies are rich in insight and allow a number of conclusions to be drawn. The central hypothesis that "the key reason for the disconnect between fisheries development aid and the impact on fisheries (natural resources) sustainability is that, by and large, development projects have lacked a solid theoretical underpinning"; is supported by the case studies. It is evident that fisheries policy design and implementation have been rooted in the natural sciences (fish biology in particular), and that other disciplines have been little used. Most importantly, economic analysis has been lacking, and it is now increasingly understood worldwide that the use of economics-based approaches for policy development is essential for improved fisheries performance.

The potential and actual **benefits** of fisheries are not effective in informing the formulation of development aid projects. Projects are mainly informed by employment, income, food

Executive Summary (continued)

supply and community stability. Unfortunately, this remains a partial view, since other forms of benefit (e.g. wealth and resource rent) are excluded. The study also revealed that Fisheries Policy has been influenced by international development narratives for natural resources. It is, however, clear that there is considerable overlap and the different approaches, when working simultaneously, can create policy conflict and problems in terms of lack of coherence. At country level, no efforts have been made to link fisheries to the wider national macro-economic development policies.

With regard to the **volumes of aid** and aid targets, these have been influenced by the prevailing development narratives (above), with an initial focus particularly on infrastructure (e.g. fishing harbours, fishing fleets). More recently, the focus has moved towards capacity-building and institutional development in general, in an attempt to address the need for more effective fisheries management. However, it is not always clear, based on the results of the four national case-studies, why the aid investment choices were made or changed over time. Furthermore, there is no evidence that the choice of aid targets was informed by consultations with recipient countries or fisheries stakeholders.

The **performance** of fisheries aid is difficult to discern accurately in all the case studies. Overall, there are concerns that project implementation has been weak and that the outcomes desired have not been achieved. In all four case study countries, the fisheries in general are currently characterised by over-exploitation, both economic and biological, suggesting that the overall contribution of fisheries aid aimed at fisheries development has not been very successful, and in many cases the fisheries are in a poorer state than before. The relationship between **fisheries reform** (with the aim of realising national fisheries potential) and aid is not always clear. The objectives and rationale behind many projects and programmes have not always been well-understood by the stakeholders involved. At times, projects have been implemented without a clear link to either fisheries policy or national macro-economy policy.

Given the above, there is a need for clear, objective-driven decision-making and the involvement of stakeholders at all levels of fishery in policy design and implementation, including the priorities for aid and the manner in which it is delivered or used.

Introduction

Over the past fifty years, most African countries have become independent of previous colonial regimes and embarked on a course of economic development with varying degrees of success. External investment in the form of international development aid has been an important component of this process.

Since many African countries have the potential to capitalise on their valuable renewable natural resources, large amounts of aid have been focused on sectors such as agriculture, forestry, water and fisheries. Inevitably, given the relatively weak status of most African national economies today, questions are being asked in many forums about the role and impact of the aid which has been provided.

In the case of the fisheries sector, it is difficult to estimate how much aid has been provided to African countries since 1960, but there is no doubt that it is a significant amount. The data available for the period 1973 to 2001 indicates that the total aid invested in African fisheries for the period is close to US\$4.6 billion. Aid continues to be invested in African fisheries today, but there are clear signs that the sector is in a weak and vulnerable condition in most countries, characterised by declining catches and incomes, high levels of over-exploitation and associated weak management.

In this report, the findings of a project which aimed to examine the relationship between international aid and fisheries in Africa are presented. The project included three broad objectives, namely:

1. To examine the nature and performance of fisheries development aid in Africa;
2. To identify and analyse the key issues involved;
3. To derive lessons for the future use of aid in fisheries.

The findings were intended to provide the basis for establishing a set of principles for the future use of fisheries aid, along with a good understanding of how the principles might be used to best effect in the future, particularly by influencing organisations concerned with allocating and using fisheries aid.

The following four chapters present a general overview and background information on fisheries aid and its use in Africa, based on a review of international literature and other secondary information; a synthesis of the results of a set of national case studies, based on studies undertaken in Ghana, Senegal, Mozambique and Uganda; the findings of a project workshop held in Accra, Ghana in June 2010, which set out to examine and discuss the national case studies in the wider context of fisheries development aid in Africa; and finally a set of key principles for development aid for African fisheries in the future.

Chapter 1

Setting the Scene – Aid and African Fisheries



Several observations regarding fisheries apply to Africa as well as many other regions throughout the world. Firstly, Africa has major fish resources, which are exploited by the marine, inland (or freshwater) and aquaculture sub-sectors. Secondly, although the exploitation of these resources produces a range of benefits, these tend to be limited to activity-related benefits. The contribution that such exploitation might make to economic growth and sustainable development under the right conditions goes largely unaddressed in fisheries policy. Thirdly, perhaps as a result, the international development records show that no African country has fully realised its potential in the fisheries arena over the past sixty years – equating roughly to the period of independence of these nations.

Yet over approximately the same sixty year period, fisheries economists have produced what appears to be a very robust analysis of why fish resources are overexploited and have developed a broad prescription of the requirements for improvement. In addition, throughout this period, the fisheries sector in Africa has been receiving apparently significant investments in the form of development aid, including funds from both bi-lateral and multi-lateral sources.

Against this background, this chapter seeks to examine the role and impact of development aid on African fisheries. It is organised as follows: the first section provides a brief review of development aid in general in order to contextualise fisheries aid. It focuses on the definition and scope of aid, the quantity, its effectiveness and what appear to be the key issues concerning it. The second section focuses specifically on fisheries aid, using a very valuable database made available by the World Bank, to identify global and African trends in such aid.

Section three considers the performance of African fisheries, using principally the FAO flagship publication on the State of Fisheries and Aquaculture (SOFIA), which provides the best overview of world fisheries. The difficulty in using this publication to address performance is that only certain indicators are available, but the available indicators are in themselves interesting in that they are perhaps indicative of the main interest that policy-makers have tended to have in the exploitation of fish resources. The section also considers some reviews of development projects assessed against their own goals.

Section four investigates more closely the link between fisheries development aid in Africa and the economic theory of fisheries over-exploitation. Given the substantial amount of time that this theory has existed and the substantial amount of empirical support for it, it seems not unreasonable to expect that it might have influenced at least some development projects, based on the assumption that the purpose of such projects is to assist African countries to improve the performance of their fisheries sector and develop increased sustainable benefits from the exploitation of their fish resources.

The fifth section considers how fisheries aid seems likely to develop over the next few years and section six concludes the chapter.

DEVELOPMENT AID – CONTEXT AND ISSUES

In this section, the nature of development aid in general is outlined, and some of the key issues relating to its role and impact are examined. This provides the context for the specific analysis of the fisheries sector which follows.

Development aid or development co-operation (also development assistance, technical assistance, international aid, overseas aid or foreign aid) is aid given by developed countries to support development in general, which can be economic development or social development in developing countries. More recently, the term “development co-operation” has been used to emphasise the idea of partnership between nations, rather than any form of asymmetric relationship between north and south countries (or developed and developing countries).

The term “development aid” is often used to refer specifically to Official Development Assistance (ODA), which is aid given by governments on certain concessional terms, usually as simple donations. It is given by governments through individual countries’ international aid agencies and through multilateral institutions such as the World Bank, and by both governments and individuals through development charities such as Oxfam.

It has long been assumed that resource transfers in the form of aid will help to enhance economic growth, which in turn would increase standards of living and lead to a reduction of poverty. Resource transfers in the form of aid represent the main “instrument” used by both bi-lateral and multi-lateral agencies for interventions in developing countries. Aid can take different forms, including grants or loans, direct donations, budgetary support, or programmes or projects.

Aid can also be viewed in the context of international capital flows to developing countries which consist of official flows from bi-lateral sources and multi-lateral sources (such as the World Bank and its two affiliates, the International Development Association (IDA) and the International Finance Corporation (IFC)) on concessional and non-concessional terms; foreign direct investment; and commercial bank loans.

Development aid per se is also distinguished from humanitarian aid, which is aimed at alleviating poverty in the long term, rather than alleviating suffering in the short term. Foreign aid includes both development aid and humanitarian aid. Some governments contentiously also include military assistance under foreign aid.

The Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) classifies foreign aid into three categories as follows:

1. Official Development Assistance (ODA): Development aid provided to developing countries (on Part I List) with the clear aim of economic development;
2. Official Aid (OD): Development aid provided to developed countries (on Part II List) and international organisations;

3. Other Official Flows (OOF): Aid which does not fall into the other two categories, either because it is not aimed at development or because more than 75% comprises a loan rather than a grant.

Quantity

Over the last 20 years, the estimated total value of ODA has been between US\$50 billion and US\$100 billion. According to the OECD DAC, ODA has risen by 10.2% in real terms to US\$119.8 billion in 2008. This is the highest figure ever recorded. It represents 0.3% of the members’ combined gross national income. Bi-lateral aid programmes and projects also rose by 12.5% in real terms compared to 2007.

In 2008, based on preliminary data, the net bi-lateral ODA from DAC donors to Africa totalled US\$26 billion and US\$22.5 billion went to Sub-Saharan Africa (SSA), an overall increase of at least 10% in real terms. The largest donors in 2008, by volume, were the USA, Germany, the UK, France and Japan. Five countries exceeded the United Nations target of 0.7% of GNI: Sweden, Luxembourg, Norway, Denmark and the Netherlands. The countries with the lowest level of performance in terms of the UN 0.7% GNI level were the USA, Japan, Italy, Greece and Portugal. The largest non-DAC donors were Saudi Arabia, Korea and Turkey.

Private contributors also make a significant contribution to development aid. For example, in the US, private donations are estimated to be at least \$34 billion a year (2000 data). However, overall, it is very difficult to determine the level of private contributions for any one country, and even more difficult to make a comparison between and across different countries.

Effectiveness

Aid effectiveness is the degree to which development aid works successfully. This can be judged in the broadest sense by the extent to which aid achieves the intended outcomes of stimulating economic growth, increasing standards of living and reducing poverty. However, the impact and effectiveness of aid are the subject of significant debate and disagreement. Most alarmingly, there appears to be a large body of academic papers which points to a non-existent, weak or even negative relationship between ODA and growth in recipient countries.

According to Roodman (World Bank, 2009: p. 82), based on a review of a set of critical studies, the main conclusion was that “Aid is probably not a fundamentally decisive factor for development ... not as important as domestic savings, inequality or governance”.

In the 1960s, economists such as Bauer and Friedman argued that aid is ineffective. Many econometric studies in recent years have supported the view that development aid has no effect on the speed with which countries develop. Negative side effects of aid can include an unbalanced appreciation of the recipient’s currency (known as Dutch Disease), increasing corruption, and adverse political

effects such as postponements of necessary economic and democratic reforms.

On the other hand, many development agencies can point to an increasing number of projects and programmes which have had a positive effect on growth and yielded good returns [according to project evaluation criteria]. There is also evidence that development assistance is becoming more closely tied to the needs of recipients, and the types and quality of policies and institutions which are emerging (Claessens et al., 2007). But even these authors describe considerable variability among donors. What is even more damaging to the long-term development process, is the unpredictability of aid flows since this curtails long-term investment spending.

Easterly (2007) claims that the situation is much worse, and that there is no evidence of greater selectivity by the World Bank or other donors with respect to need, policies and institutions. Easterly (2007) and Birdsall (2008) also assert that the World Bank and other donors have been persistently slow learners that do not acknowledge failure and adjust operational practices accordingly.

The overall picture is therefore confusing at all levels – project, programme and policy. Clearly there is an increasing build-up of knowledge and experience of what works and what does not work. However, the variability that appears to exist in terms of the quality and selectivity of lending and whether this has improved over time, suggests that policy decisions and underlying technical interventions are affected, to varying degrees, depending on the context, by other imperatives or factors.

Key issues

The overall heterogeneity of findings on aid effectiveness raises a whole set of issues. The first of these concerns the value and relevance of the findings of aid effectiveness assessment studies. It could be claimed that the complexity of the reality of the relationship between aid and development outcomes is such that this makes any assessment exercise quite problematic at best. The extent to which an econometric approach can do this has been reviewed by Easterly (2007).

Secondly, if our understanding of the nature of the development process itself is limited, it could mean that the impact of aid may not necessarily fall within the measurement boundaries of conventional methodology. The pace of change may be slower than expected, depending on the country and context in question, until, for example, a “critical mass” of capital (human, financial, technological, etc.) is in place. On the other hand, the development performance of certain Asian countries, such as South Korea, has shown how rapidly change can occur.

Thirdly, a good understanding of the development process within a particular country is clearly needed in order to identify both the opportunities and constraints which present themselves. International donors have been criticised in the past for imposing solutions on countries in Africa

and elsewhere in the developing world. Thus for example Galbraith's (1980, p. 41) research into rural poverty pointed the way with the following conclusion:

“...diagnosis [of poverty] that proceeds from the available remedy [i.e. capital and technology in rich donor countries] does not inspire confidence. And the results of the current considerable effort and greater interest [poverty alleviation], though not negligible have certainly fallen short of expectation in the countries of mass poverty – India, Pakistan, Bangladesh, Indonesia, large parts of Africa and Latin America.”

Fourthly, related to the issue of so-called solutions to development problems, it should also be noted that knowledge, learning and thinking about development has evolved rapidly over the past sixty years. Changes in the conceptualisation of the development process, the nature of poverty and economic growth and welfare have resulted in a host of development narratives and approaches, and an associated investment of significant levels of aid in particular activities.

With hindsight it is clear that the early approaches in Africa, which focused on state-directed, technology-driven production as a means of stimulating growth, were ill-conceived, but typical of the time. They under-estimated the weakness of the state, the level of political development and governance, institutional arrangements and capacity. More contemporary narratives, approaches and aid investments have attempted to address development on a broader front, taking into account the need to focus on growth, while addressing the underlying weaknesses of many African states. However, it should also be noted that in many countries a variety of different narratives may be used at any one time to inform the use of development aid; in other words, old narratives do not disappear that easily, even when shown to be inappropriate.

The fifth issue is that in some countries, it can be asserted that aid has had a negative impact on development in a number of ways. Principally this has occurred through the creation of a dependency on aid and the unintended encouragement given to rent-seeking and corruption. Clearly, under conditions of weak governance, where the policy-making process may be controlled to focus on channelling benefits to a minority elite, donors have to consider carefully whether the perceived needs and approaches being used to address development constraints, and funded by aid, are the most appropriate.

Sixth, the form and quality of aid has also been questioned over the years – grants or loans, direct donations, budgetary support or programmes and projects. Clearly the choice depends on the context and a good appraisal and understanding of what form of aid would be most effective. One area of criticism has been the conditions attached to aid – tied aid can reduce the effectiveness of aid.

Another is the tendency to focus on short- to medium-term, project-based aid with an emphasis on products, results and accountability, rather than a long-term, and more uncertain, investment in a process of development, using an adaptive, “learning-by-doing” approach.

Seventh, the issues of aid performance and accountability have been increasingly scrutinised. While detailed and technical econometric studies may show that aid has no effect on development, other studies show that some forms of intervention can be highly effective, such as clean water supplies, education vouchers for textbooks, suitable fertilisers and others (Banerjee and Ruimin, 2003). In some situations, aid disbursement appears to be the main criteria for success, rather than a closer look at the impact (which may be positive or negative). Other forms of aid (private aid and remittances) can be substantial, but the amounts given or their impact are not well-known at all.

Finally, the debate over aid effectiveness feeds into the debate on the future of aid. For example, the question arises as to whether the form of aid should be changed, or indeed whether aid should be decreased or increased. Clearly, there is an increasing body of knowledge and experience on the use of aid. Despite the pessimistic analyses on the impact of aid on development, it is unlikely that aid will not be given in the future. Some experts like Sachs (2005) advocate a substantial increase in the level of aid, whereas Yunnis (2009) places emphasis on a need to shift towards the activation of local assets and the greater use of micro-credit (for example the Grameen Bank). Others such as Collier (2007) question the role of aid at all in Africa, where governance is weak and many countries are unable (and unlikely to be able) to support viable economies into the foreseeable future.

FISHERIES DEVELOPMENT AID – GLOBAL AND AFRICAN ESTIMATES

This section outlines the nature of development aid in fisheries, its different forms and the extent to which it has been applied in African fisheries.

The extent to which development aid has been provided to the fisheries sector throughout the world over the past fifty years is not well-known. There is little reference to the total level of aid provided in international literature. The fact is that there are a large number of donors who provide development aid to fisheries and other related sectors, the avenues and methods of disbursement of funds are complicated, and there have been very few attempts to collate and analyse the information on a global or regional basis.

A database developed by Hicks (2007) was made available by the World Bank. It provides a more comprehensive overview of development aid to fisheries for the period 1973–2001. It should be noted, however, that the results reported are preliminary and tentative. Using a combination of databases from different sources, including Project-Level Aid (PLAID) and both multi-lateral and bi-lateral agencies, 4,396 fisheries projects were identified out of a total of 450,000 projects.

The total amount of fisheries aid identified by the database between 1973–2001 on a global basis was US\$16,324 million. The top ten donors gave US\$11,312 million. The highest amounts were given by the World Bank [International Bank for Reconstruction and Development (IBRD)] (US\$3,558 million) and Japan (US\$3,285 million), followed by a number of other multi-lateral and bi-lateral donors (Table 1). It should be noted that the African Development Bank is not ranked in the top 10 donors.

Table 1: Top 10 Global Fisheries Donors

Donor	US\$ million	Donor	No. of projects
1. World Bank (IBRD)	3,558	1. Japan	526
2. Japan	3,285	2. Canada	375
3. World Bank (IDA)	734	3. Norway	373
4. Asian Development Fund	627	4. France	347
5. Inter-American Development Bank	600	5. European Union	293
6. Norway	563	6. United Kingdom	258
7. France	549	7. Sweden	250
8. Germany	501	8. Netherlands	213
9. Sweden	462	9. Australia	208
10. Netherlands	433	10. Italy	194
Total	11,312	Total	3,037

Source: Calculations based on database developed by Hicks (2007)

The total number of fisheries aid projects during the same period was 3,037. Japan (526), Canada (375) and Norway (373) operated the highest number of projects, followed by other donors, mainly on a bi-lateral basis.

The major recipients of fisheries aid (totalling US\$7,563 million) were countries in Asia (**Table 2**). The top three were China (US\$2,145 million), Indonesia (US\$742 million) and Bangladesh (US\$706 million). Brazil (US\$763 million) was placed second overall. Many African countries were included in the category of least developed countries (US\$687 million).

In terms of the number of fisheries aid funded projects, totalling 1,436 (**Table 2**), the least developed countries (mainly in Africa) had the highest number (341). A mixture of specified Asian and African countries (Mozambique, Angola, Senegal) were included in the top 10, and also a set of unspecified countries in Africa.

Table 2: Fisheries Development Aid – Top 10 Global Recipients

Recipients	US\$ million	Recipients	No. of projects
China	2,145	Least developed countries	341
Brazil	763	Asia/Pacific (unspecified)	185
Indonesia	742	Mozambique	147
Bangladesh	706	Indonesia	131
Philippines	705	Africa (unspecified)	113
Least developed countries	687	India	112
India	659	Angola	106
Sri Lanka	406	Bangladesh	104
Mozambique	385	Senegal	103
Angola	365	Vietnam	94
Total	7,563	Total	1,436

Source: Calculations based on database developed by Hicks (2007)

Of the 4,396 projects listed in the Hicks database, 1,988 concern Africa or African countries (including some projects that are identified only as targeting least developed countries). Of the US\$16.32 billion total, Africa's share of fisheries development aid was US\$4.60 billion.

Table 3 reflects the ten main donors to African countries in terms of donation volume and number of projects funded.

Table 3: Fisheries Development Aid in Africa – Top 10 Donors

Donor	US\$ million	Donor	No. of projects
Japan	799	France	294
France	432	EU-OECD	206
Sweden	392	Sweden	167
Italy	312	Japan	165
EU-OECD	309	Norway	161
AFDB	281	Italy	131
Norway	272	Canada	117
West Germany	234	Netherlands	100

Table 3: Fisheries Development Aid in Africa – Top 10 Donors (continued)

Donor	US\$ million	Donor	No. of projects
World Bank (IDA)	178	Belgium	84
World Bank (IBRD)	145	Spain	81
Total	3,354		1,506

Source: Calculations based on database developed by Hicks (2007)

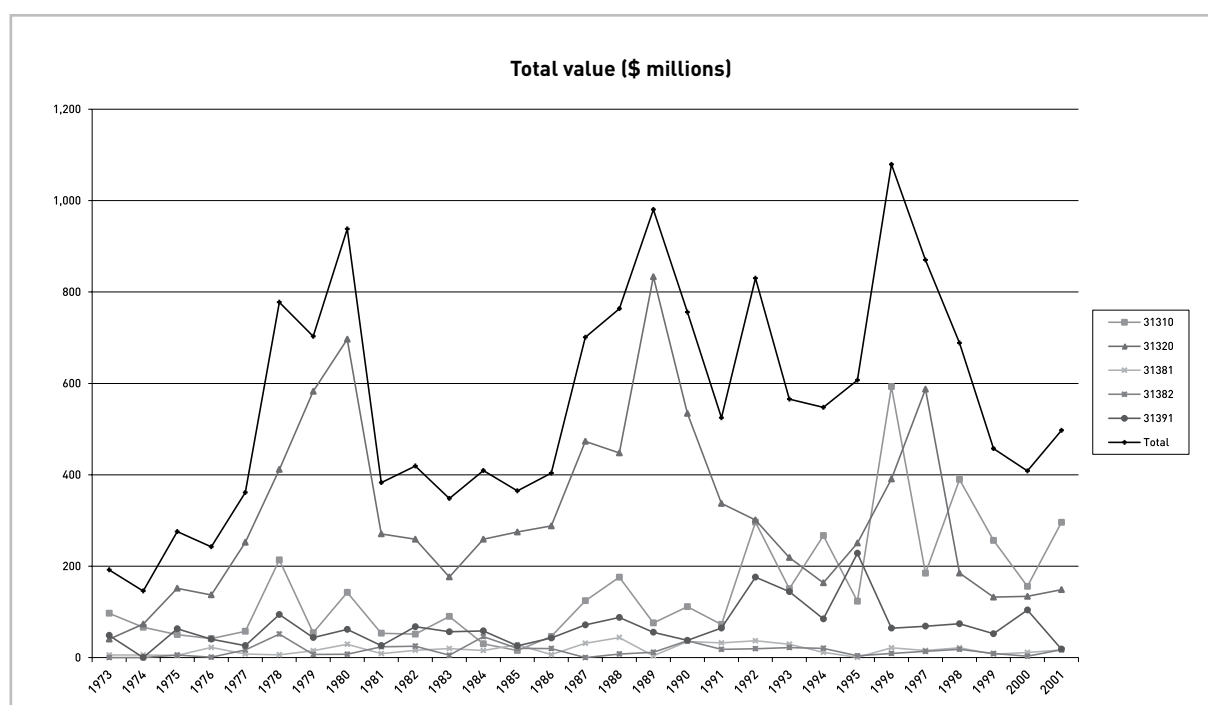
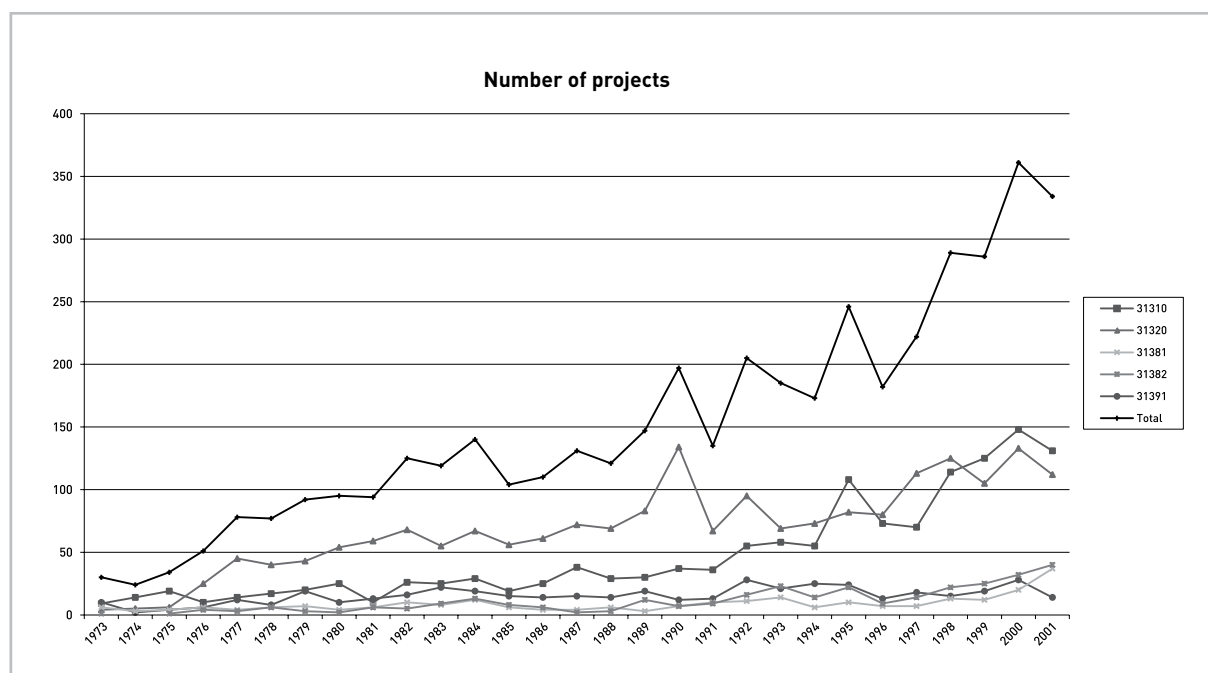
As shown in **Table 4**, the top ten African recipients received fisheries development aid valued at US\$2,678 million. The top three recipients were Mozambique (US\$385 million), least developed countries (unspecified) (US\$372 million) and Angola (US\$366 million). The total number of fisheries projects funded for the top ten recipients in Africa was 1,130. The major recipients in terms of number of projects were least developed countries (334), Mozambique (147) and Africa (unspecified) (113).

Table 4: Fisheries Development Aid in Africa – Top 10 Recipients

Recipient	US\$ million	Recipient	No. of projects
Mozambique	385	Least developed countries	334
Least developed countries	372	Mozambique	147
Angola	366	Africa	113
Morocco	342	Angola	106
Senegal	302	Senegal	103
Mauritania	203	Madagascar	75
Egypt	191	Mauritania	69
Madagascar	190	Tanzania	64
Tunisia	178	Namibia	60
Somalia	149	Morocco	59
Total	2,678		1,130

Source: Calculations based on database developed by Hicks (2007)

Projects in the database are coded, very broadly, to indicate their main target according to the OECD Creditor Reporting System (CRS) sector codes, as explained in the graphs following.

Graph 1 (top) and Graph 2 (bottom): Fisheries Development Aid Projects worldwide by number and value (1973-2001)

Projects in the database are coded using the OCED CRS Sector Codes. These are as follows:

- 31300 Fishing, general
- 31310 Fishing policy and admin management
- 31320 Fishery development
- 31381 Fishery education/training
- 31382 Fishery research
- 31391 Fishery services

Graph 1 shows how the total number of projects evolved from 1973 to 2001, according to broad categories. It shows that the number of projects increased almost linearly over the period. An increasing number of projects concerning policy (31310) are seen as the period progresses.

Graph 2 shows how the total value of projects changed over the period. The picture is far more variable. Overall, there is no clear upward trend, indicating that the average spent per project has declined over the period.

For most of the period, spending on “fishery development” dominated, but in recent years there has been a clear trend towards “fisheries policy and administration”, a fact that may explain the decline in average project size. Nonetheless, spending on development has remained substantial. Spending on human capital development (as indicated by education, training and research) has always been at relatively low levels.

The interpretation of these statistics requires some care. As always, the devil is in the detail. For instance, the apparently significant increase in spending on 31310 in 1996 can be explained entirely by the fact that Australia’s donation of over US\$300 million as core funding for the Forum Fisheries Agency was assigned to that year. In 1998, over a quarter of the spending on this category represented a single project in China entitled “Sustainable Coastal Resource Development Project”. This title is somewhat suggestive that this project might easily have been classified in 31320, although, of course, without detailed knowledge of the project’s scope and objectives, it is impossible to be sure on this point. In 2001, there was no dominant project, so the figures probably do represent a switch towards an increased policy focus. It is nonetheless worth noting that the second largest project

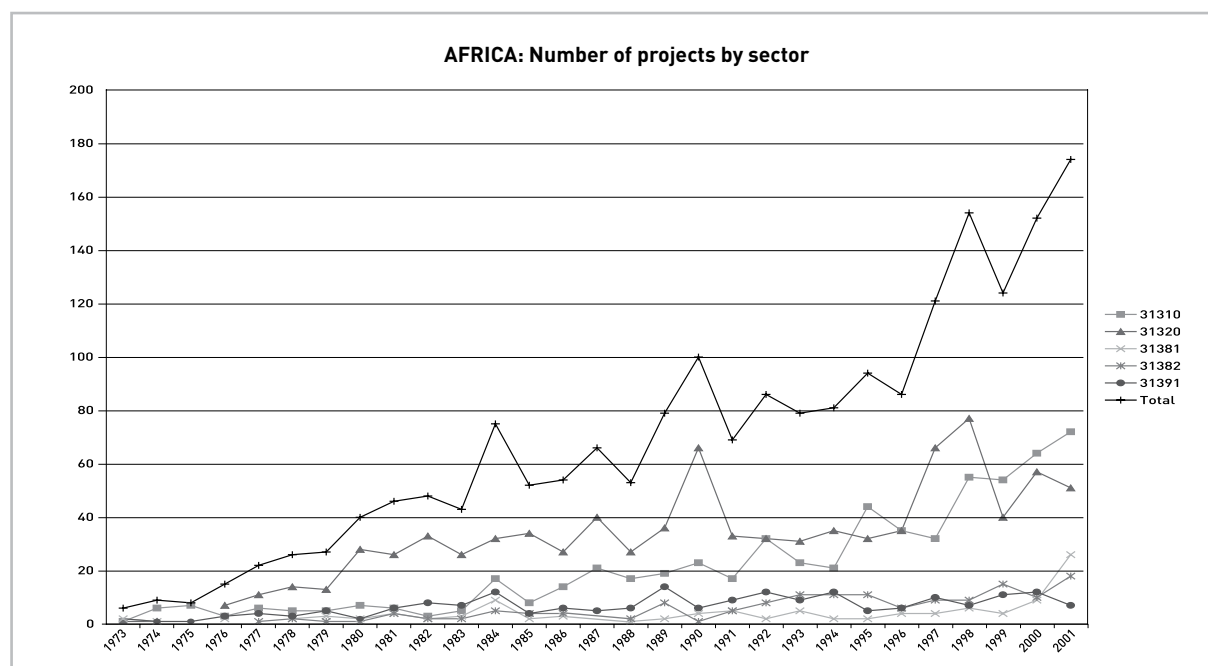
concerned US\$38 million funding made available by the EU to improve the health of fishery products.

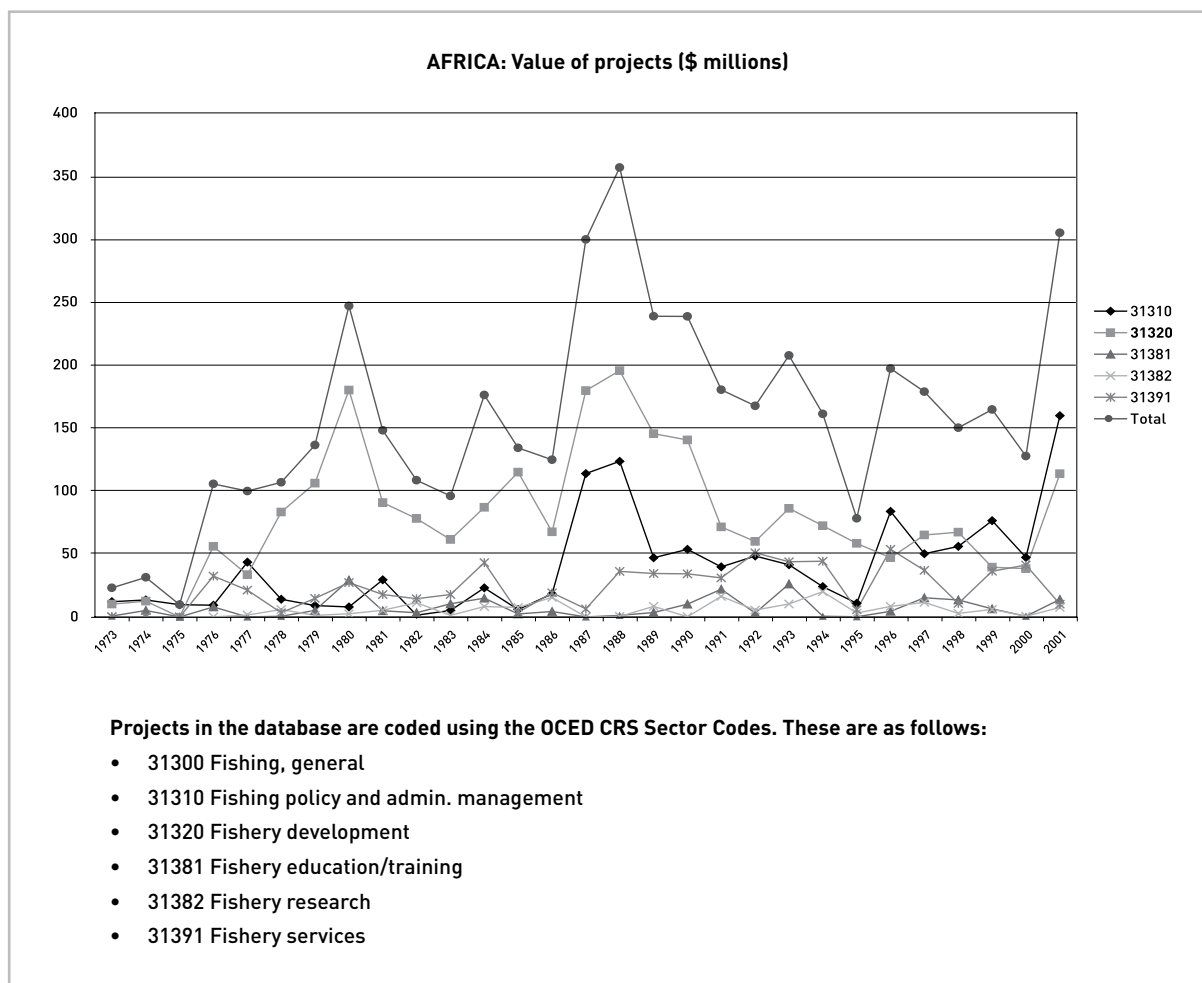
In terms of the number of African projects, the evolution was quite similar to that experienced globally. The number of projects increased, not quite monotonically, but almost, with fishery development projects dominating for most of the period, and a gradual increase in the importance of fishery policy projects, the latter comprising the greatest number.

In value terms, the trends in Africa also reflect those globally, although with perhaps a less marked concentration on fishery development compared to policy. As is the case elsewhere in the world, the human capacity dimension is difficult to discern, at least as measured by fishing education, training and research. It is however quite likely that some of the development projects did include such capacity development to some extent.

Two features of the PLAID database stand out. Firstly, for most of the period, the overriding focus of fisheries aid was on fisheries development. Even in 1974, around 10% of the world’s fish resources were categorised by the FAO as overexploited, depleted and recovering, and 50% as fully exploited, leaving only 40% as underexploited and moderately exploited. The scope for fisheries development was therefore somewhat limited, and it is interesting to speculate as to the expectation of aid agencies in such a situation. The corresponding percentages for 2007 (UNFAO, 2009, p. 30) were 28%, 52% and 20%. It is even more interesting to speculate as to why anyone would continue to think that fishery development was a priority in such circumstances. Yet the PLAID data shows that, at least until 2001, substantial sums continued to be invested in development, both globally and in Africa. Secondly, there was an apparent increasing focus on fisheries policy projects towards the end of the period covered by the database.

Graph 3 (below) and 4 (next page): Fisheries Development Aid in Africa by number of projects and value (1973-2001)





FISHERIES PERFORMANCE IN AFRICA

In this section the current status and performance of the fisheries sector in Africa is reviewed. It builds on the findings of the previous section, which identified that at least US\$4.60 billion was provided in development aid to this sector between 1973 and 2001. In turn, the extent to which the performance of fisheries aid can be deduced is considered.

This assessment is not easy to make, firstly because, as shown in the previous section, there is uncertainty surrounding the exact level of development aid which has been provided. Secondly, there are comparatively few national or international assessments of the performance of the fisheries sector in relation to sustainable development. This would involve evaluating the contribution of fisheries to economic, social and environmental (or biological) objectives. By and large, fisheries assessments have tended to focus on fisheries production (output) and the status of the fish stocks (environmental criteria), and have not considered the economic and social dimension to the same extent.

To overcome these assessment constraints, the status and performance of fisheries in Africa, in the context of development aid investment, is considered from two perspectives. Firstly, African fisheries are examined

briefly in the wider setting of global fisheries status and performance, based on the most recent UN FAO State of Fisheries and Aquaculture Report (SOFIA) (2008). The major trends are identified. African fisheries are compared at a regional and country level using the most up-to-date statistics. Secondly, the performance of specific fisheries programmes and projects in Africa are examined, based on a recent study for the FAO.

African fisheries – global, regional, national perspectives

The most recent edition of the UN FAO SOFIA (2008) provides the most comprehensive overview available of world fisheries and aquaculture. A summary of the key characteristics of world fisheries is shown in **Table 5**.

The most recent estimate of global annual fisheries production is 144 million tonnes. This is made up of marine capture fishery (82 million tonnes or 57%), inland or freshwater capture fishery (10 million tonnes or 7%) and aquaculture (52 million tonnes or 36%). Economic values for this activity are not provided, although the estimated first-sale value of global capture fisheries production is US\$91.2 billion.

Overall, total annual fisheries capture production has stabilised in recent years, whereas aquaculture production

has continued to increase each year at a rate of 7%. China, Peru and the United States remain the top fishing nations (capture production), with China attaining the highest aquaculture production and Asian countries accounting for 52% of global capture production.

For Africa, total annual fisheries production currently stands at 7.68 million tonnes or 5% of global production. The marine sub-sector produces 4.56 million tonnes (5%

of global total) followed by inland production (2.3 million tonnes or 24% of the global total) and aquaculture (0.76 million tonnes or <1% of the global total). Total fisheries production in Africa has increased by 22% over the past decade; mainly due to inland fisheries and aquaculture. Marine capture fisheries production has remained relatively static at about 5 million tonnes per year. The leading nations are Egypt, Morocco, South Africa, Nigeria and Namibia (between 500 and 1,000 kt/year).

Table 5: Key features of fisheries in 2006 – Global and Africa

Feature	Global	Africa
1. Fisheries production	<p>Marine capture: 82 million tonnes (Mt) (57%) Inland capture: 10 Mt (7%) Aquaculture: 52 Mt (36%) Total: 144 Mt (100%) First sale value: US\$91.2 billion</p> <p>Capture fisheries output: stable Aquaculture: 7% + per year</p>	<p>Marine capture: 4.56 Mt (5% global) Inland capture: 2.3 Mt (24% global) Aquaculture: 0.76 Mt (<1% global) Total: 7.68 Mt (5% global)</p> <p>Total production: increasing by 22% (2000-2006) Marine capture: stable Inland and aquaculture: increasing</p>
Major producers	China, Peru, USA (capture), China (aquaculture and inland)	Egypt (970,924 Kt), Morocco (865 Kt), South Africa (617 Kt), Nigeria (552 Kt), Namibia (509 Kt)
2. Fishing fleets	<p>2.1 million engine-powered vessels (stable) Mainly in Asia <12 million vessels (90%)</p>	<p>200,000 engine-powered vessels (2nd after Asia) <12 million vessels (96%)</p>
3. Livelihoods and employment	<p>Direct primary employment: Capture fisheries: 43.5 million Aquaculture: 4 million Total: 47.5 million</p> <p>Secondary employment: 170 million With dependents: 520 million (8% world population) Mainly Asia (86%)</p>	<p>Fishers: 3.6 million 0.8 % economically active population on average by country</p>
4. State of fisheries resources	<p>Marine: Overexploited stocks: 19% Depleted/recovering: 8% Fully exploited: 52% Moderately or underexploited: 20% Relatively stable situation</p> <p>Inland: slow increase, relatively underexploited</p>	<p>Marine: Area 34 East and Central Atlantic (ECA): 2-4 Mt (fully exploited) Area 47 South East Africa (SEA): 1.5 Mt (overexploited) Area 51 Western Indian Ocean (WIO): 4.3 Mt (fully exploited) Area 37 (Med): 1-2 Mt (fully exploited)</p> <p>Inland: 11% increase (2000-2006) (underexploited)</p>

Table 5: Key features of fisheries in 2006 – Global and Africa (continued)

Feature	Global	Africa
5. Fish utilisation and trade	110 million tonnes (77% catch) used for human food Trade: 37% catch (value US\$86 billion) Exports grown by 32% (2000-2006) 49% exports from DCs	Africa is a net exporter of fish (since 1985) Total exports: US\$4.4 billion (5% global) Total imports: US\$679 million (<1% global) 19.4 % agricultural exports on average
6. Supply and consumption	Global per capita fish supply increased to 16.7 kg in 2006 (from 16.4 kg in 2005) Fish contributes 15% global protein supplies	Fish supply in SSA is static (8.3 kg/capita) Mean fish consumption by country: 21% daily protein - Ghana (65%), Sierra Leone (63%), Gambia (57%), Nigeria (36%), South Africa (8%)
7. Policy and management	Policy development and fisheries management are major challenges Key issues: <ul style="list-style-type: none"> Limited institutional capacity Role of public sector reform and better governance, and ODA Concern over fishing capacity and subsidies Also in key areas (mainstreaming EcSA and PrecA, by-catch, bottom trawl regulations, shark fisheries, IUU) Prioritisation of capacity-building Role of international and regional dimensions 	There have been few objective assessments of policy and fisheries management in Africa Some recent indicators include: <ul style="list-style-type: none"> Fisheries development policy: PRSPs – fisheries quality rating: 32% WB-CAS rating: 6% EU-CSP rating: 10% Mean value: 16% Fisheries management: Formulation/implementation mean: 34% Fisheries management (McWhinnie rating): Morocco (33%) Namibia (50%) South Africa (50%)

Source: FAO SOFIA (2008)

The number of fishing vessels powered by engines was about 2.1 million which were concentrated in Asia (70%). Almost 90% of vessels were less than 12 m long. Africa was second to Asia with over 200,000 vessels with a high proportion of vessels in the fleet of under 12 m long (96%). Fleet sizes remained stable over the past decade.

There were 43.5 million people engaged directly, full- or part-time, in fisheries production (capture and aquaculture), and a further 4 million people were engaged on an occasional basis (2.5 million in India). Taking multiplier effects into account, primary fishing and aquaculture plus secondary activities such as fish processing, total employment worldwide in the fishing industry was about 170 million. Taking account of dependents, about 520 million people could be dependent on the sector, or nearly 8% of the world population, mainly in Asia. After Asia, Africa had the highest number of fishers (3.6 million) representing on average 0.8% of the economically active workforce in African countries. The highest level of participation in fisheries occurred in Chad (8%), Ghana (2.4%), Benin (2.2%), Gabon (1.5%), Mali (1.3%), Senegal (1.3%) and Tunisia (1.3%).

When looking at marine fishery resources, about 28% of stocks were either overexploited (19%), or depleted or recovering from depletion (8%). A further 52% were fully exploited. Only 20% were moderately or underexploited. This situation remained stable over the previous 10–15 years. Production grew continuously for inland fisheries, and reached 10 million tonnes (11% capture production) in 2006. Inland fisheries are considered important in many developing countries, especially for dietary contributions and there are few examples of over-exploitation in terms of inland fisheries reported. The status of the stocks for the four FAO designated marine fishing areas around Africa (34, 47, 51 and 57), was either fully or overexploited, with annual catches of 1–5 million tonnes.

Inland fisheries in Africa appeared to be fairly healthy and capable of supporting further exploitation. Aquaculture is relatively insignificant in Africa, except in a few countries such as Egypt (595,030 tonnes in 2006). Overall production was low (0.75 million tonnes) but the growth rate was high (173%), albeit from a low baseline. It remains to be seen whether aquaculture will continue to develop at this rate in Africa.

In 2006, more than 110 million tonnes (77%) of world fish production was used for direct human consumption. The remainder (33 million tonnes) was used for non-food products, especially fishmeal and fish oil. There is a significant global trade in fish and fish products, representing more than 37% (live weight equivalent) of total production, valued at US\$85.9 billion. Exports of fish products increased by 32.1% in the period 2000 to 2006. Overall fish prices showed an upward trend in line with increasing trends in food prices. China was the leading fish exporter (US\$9.3 billion) and Japan (US\$14 billion) was the leading importer. Exports from developing countries are economically important and reached US\$24.6 billion (2006). Aquaculture products also grew significantly. Africa has been a net exporter of fish since 1985. Total annual exports are currently valued at US\$4.4 billion (or 5% of global trade). Total imports are US\$679 million (or <1% of global trade). On average, for countries in Africa, fish exports represent 19.4% of total agricultural exports. The leading exporters are Angola, Gabon, Namibia and Mauritania, and the main market is the European Union (US\$3.5 billion).

Global per capita fish supply increased slightly to about 16.7 kg in 2006 (from 16.4 kg in 2005). There has been an overall upward trend since the 1960s of 9.9 kg. In the past three decades, the per capita supply of fish remained almost static in SSA. Fish contributes about 15% to world protein supplies and is an important source of animal protein in many developing countries (> 50% supply for Bangladesh, Cambodia, Indonesia and many parts of Africa). For SSA, fish supply has remained static for some time at 8.3 kg/capita. The contribution of fish to daily protein intake per capita was high (21% on average by country). Fish is particularly important in this regard for countries such as Ghana (65% daily protein intake per capita is fish), Sierra Leone (63%) and Gambia (57%). Fish also remains relatively important for countries with large economies and populations (e.g. Nigeria, 36% and South Africa, 8%).

Fisheries policy development and fisheries management implementation are major challenges for many countries. The FAO SOFIA (2008) identifies the following issues in this respect:

- Limited institutional capacity is a major constraint for better fisheries management;
- Improvements in resource management are proceeding hand-in-hand with public sector reform and measures to improve governance;
- The provision of development assistance is being used as an incentive in the above process;
- There is a lack of progress in certain key areas (fishing capacity and subsidies);
- Limited progress on other underpinning topics (mainstreaming the precautionary and ecosystem approaches to fisheries, elimination of by-catch and subsidies, regulation of bottom trawl fisheries, management of shark fisheries, dealing with illegal, unregulated and unreported fishing (IUU));
- The need to prioritise capacity building for fisheries management in both developed and developing countries;
- The need to strengthen the international and regional dimension of fisheries management and aquaculture (in the future almost all of the world's major fish stocks will be covered by regional fisheries management organisations (RFMOs)).

Using a variety of sources, it is possible to piece together some information on the coverage, quality and impact of fisheries policy in Africa (there is no comprehensive assessment in the literature). A number of tentative conclusions can be drawn as follows:

- Many countries in Africa (65% overall) have completed strategic policy frameworks for economic development, poverty reduction and aid – including a Poverty Reduction Strategy Paper (PRSP) (World Bank), a Country Assistance Strategy (CAS) (World Bank) and a Country Strategy Paper (CSP) (European Union);
- The extent to which the fisheries sector's potential contribution to national development is recognised in these policy documents is very low – PRSP (32% average quality score), CAS (6%) and CSP (10%);

- The average quality score of fisheries adequately represented in all three policy frameworks is only 16%;
- Fisheries management across a sample of major fishing nations in Africa was assessed in terms of formulation quality, implementation quality and an overall score – giving low average scores of 35%, 32% and 34% respectively;
- The fisheries management quality scores for Africa (above) were low compared to countries with successful fisheries (examples of best practice), such as Iceland (72%, 62% and 66%) and New Zealand (71%, 57% and 64%). Only Namibia scored well in this respect (63%, 70% and 67%).

As an alternative to examining the overall performance of African fisheries at global, regional and national levels using the information in the FAO SOFIA (2008), fisheries aid projects can be considered on their own terms.

In 2008, FAO/PROFISH commissioned a study (Macfadyen, 2008) to assess the impact of development assistance in fisheries and aquaculture. Building upon an earlier PROFISH review of fisheries development assistance at the project level using the PLAID database, the objective was to review and analyse the available impact assessments of fisheries/aquaculture development assistance undertaken by the major multi-lateral and bi-lateral donors and agencies, including projects in Africa. Some of the key findings included:

- Donor organisations may have a vested interest in seeing evaluations that report positively on their activities. Such vested interests may compromise the integrity of the evaluations completed, irrespective of whether they are self-assessments or evaluations that are contracted out to consultants/third parties (p. vi);
- Impacts are often inadequately dealt with in evaluation reports, especially because they may be more problematic to assess than other evaluation questions (p. vi);
- Many donors do not appear to have conducted programme evaluations (p. vi);
- There is often a tendency for programme design documentation to be more specific about activities and outputs than outcomes and impacts, resulting in a failure of many evaluations to be able to state clearly the intended impacts and outcomes (p. vi);
- For evaluations in the post-1990 period ... most common intended impacts relate to improved management and sustainable exploitation rather than production increases (p. vi);
- Two out of every three evaluations reviewed claim very extensive or good impacts/outcomes resulting from development assistance (p. vi);
- Various problems and inconsistencies with evaluation methodology were encountered, thus reducing the confidence in the impacts being claimed in the reports (p. vii);

- Few evaluations suggested that development assistance actually results in negative impacts/outcomes (p. vii).

Macfadyen (2008) concludes that many claims are made about the positive impacts of fisheries/aquaculture development assistance, but that the quality and rigour of the evaluations often preclude any certainty about whether such impacts actually occurred, and if they did, whether they were caused by the intervention or just correlated with it.

Such major inconsistencies make it extremely difficult to assess the performance of fisheries in relation to fisheries aid. While fisheries performance in Africa and other parts of the world, based on indicators derived from FAO SOFIA (2008), is relatively poor (in the context of significant aid investment), the project-based assessments portray a picture of success, but beg questions about the credibility of the result.

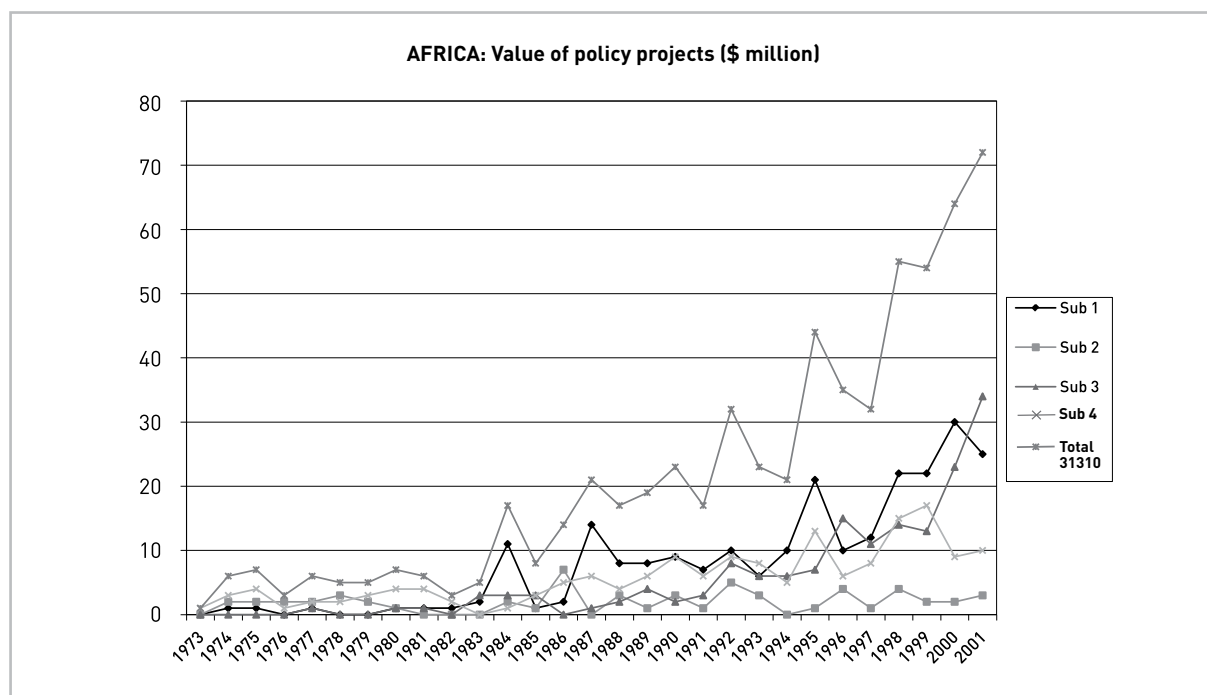
FISHERIES DEVELOPMENT AID IN AFRICA AND THE ECONOMIC THEORY OF FISHERIES OVER-EXPLOITATION

Over the past 50 years or so, economics has developed a very robust qualitative analysis of why marine capture fisheries are over-exploited. This analysis is also relevant to inland water bodies (particularly larger bodies, such as Lake Victoria). The analysis draws two main conclusions. Firstly, when the access arrangements are free and open, fisheries will be overexploited, first economically and then biologically (if economic parameters allow sufficiently high exploitation rates). Secondly, management systems which fail to deal with these access conditions (so-called regulated open access) are likely to make things worse by dealing with the symptoms rather than the causes. Solutions are to be found in the area of policy and institutions and an institutional framework is required which gives fishers an incentive to invest in the fish stock rather than in mining it.

The recent increase in projects oriented towards fisheries policy offers some encouragement, but this is a very broad code. In order to facilitate analysis, sub-codes were introduced into each category by Hicks (2007). For the policy category (31310), the sub-codes are as follows:

1. Policy and institutions;
2. Fishing boats and equipment – specified for research and management;
3. Conservation of fisheries or fish habitat; marine pollution control;
4. Monitoring and assessment; feasibility; workshops unspecified; other.

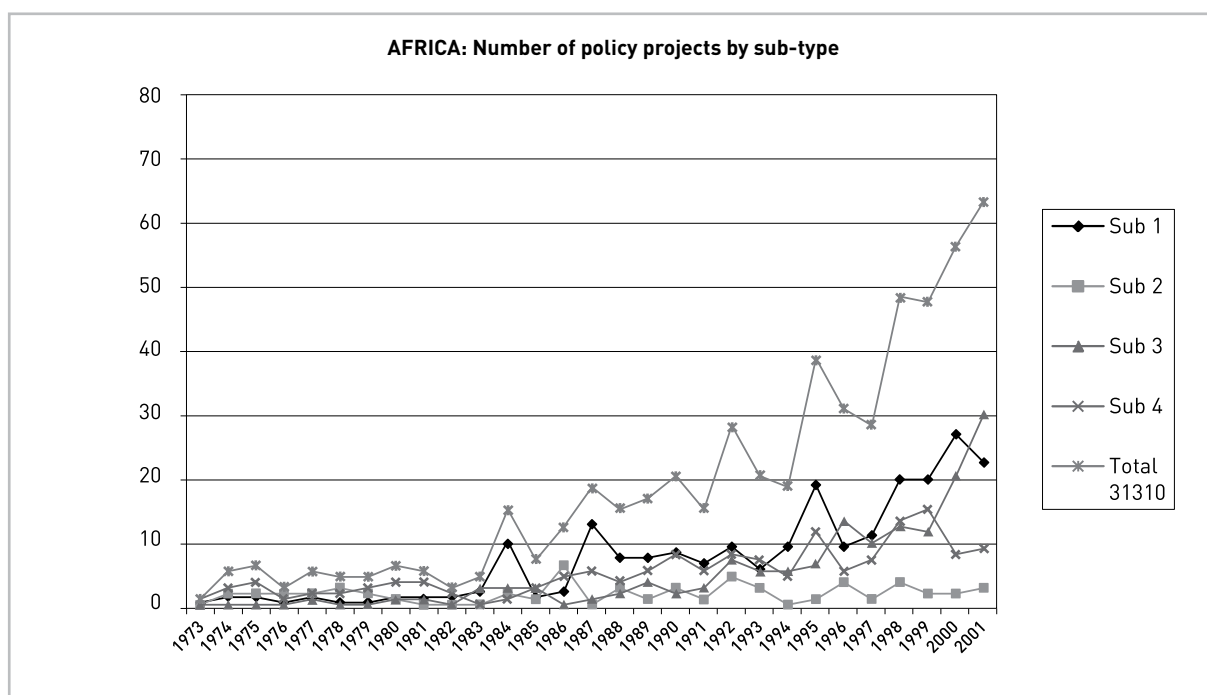
The other broad codes were similarly sub-divided; but these will not be analysed here.

Graph 5: Policy projects in Africa by type (1973-2001)

Graph 5 shows the number of policy projects in Africa on an annual basis from 1973 to 2001 using the sub-codes listed above.

Of the 622 fisheries policy projects, some 236 concerned policy and institutions (category 1). This category has become gradually more important. Interestingly, the most important category in 2001 was conservation (category 3). Having spent some 20 years or more developing the fisheries, the focus appears to be switching to conservation, a trajectory not inconsistent with attempting to achieve a maximum sustainable yield (MSY) world view.

As previously indicated, the situation, in value terms, is far more variable from one year to the next (**Graph 6**).

Graph 6: Policy projects in Africa by value (1973-2001)

The very high figures for 1987 and 1988 represent some very large individual projects rather than a change in broad trend. Of the US\$76 million attributed to “policy and institutions” in 1988, almost US\$60 million relates to a Swedish-funded project in Angola, US\$32 million of which was for “construction works”, which does not seem to fit very well with a sub-sector 1 coding. In 1987, Sweden either funded another very large project in Angola (US\$76 million), or, as seems more likely, there is an error in the database with the ten project lines each being attributed the total project budget of US\$7.6 million. The same query arises concerning a Swedish project in Kenya where either the total budget was US\$32 million, or more likely the US\$10 million budget was attributed to three separate lines. In each case, the lower figure would fit in better with the overall data set, but of course this does not necessarily make the lower figure correct.

The high figure for 2001 also calls for some comment. Of the US\$61 million attributed to policy and institutions, over US\$39 million relates to an EU-funded project aimed at least developing countries focussing on fish product health. Whilst undoubtedly an important issue, especially if these countries wish to continue to export to the EU, it is perhaps not quite the kind of fisheries management project that might be expected under the policy and institutions banner. The second most important project that year, valued at US\$7 million, concerns a contribution by Norway to the Trust Fund for the UN Division for Ocean Affairs & Law of the Sea.

In fact, the analysis of the 31310 code and its sub-sections perhaps provides the key to the widespread failure of fisheries development aid.

In analysing the PLAID database, it is impossible to find a single project that directly addresses the fundamental fisheries management issues identified by fisheries economics and summarised at the beginning of this section. Given this, and given the robustness of basic economic analysis, it is hardly surprising that development aid for fisheries is widely considered to be a failure. Indeed it would have been amazing had it been anything else.

We hypothesise therefore that the most significant problem is that fisheries aid has simply not focussed on the key issue. Instead, it has largely focussed on fisheries development and predictably the consequence has been increased exploitation intensity.

Similar problems bedevil attempts to assess the performance of fisheries aid. In the previous section, we attempted to assess the performance of fisheries in general and make deductions about aid performance from this. However, this approach is stifled by the fact that data are only available for certain indicators, which are not necessarily those that provide an adequate basis on which to assess aid. In fact it may be argued that they do not even provide an adequate basis on which to assess the state of fisheries, even though they are widely used for this purpose. The other alternative, also discussed in the previous section, is to use project evaluations, but these tend to be over-optimistic.

In section 2 we argued that when looking at aid in general, the litmus test, at least for economists, is whether foreign aid has a positive impact on GDP and economic growth. On this basis, the current wisdom seems to be that aid does work, but only if the appropriate policy environment (broadly speaking, good governance) exists in the recipient country.

Easterly (2003, p. 30) draws attention to the fact that: “The empirical literature on the connections between aid and economic growth has been hampered by the lack of a clear theoretical model by which aid would influence growth and which could pin down the empirical specification of the aid-growth relationship.”

We believe that a similar problem exists in the analysis of the impact of fisheries aid, but in a different kind of way. The theoretical model of the economics of fisheries exploitation provides a quite robust framework for the route by which fisheries aid might influence growth. The difficulty is not so much that a clear model is lacking, but rather that almost nobody seems to use it, either in practice to design fisheries aid interventions or in theory, to analyse their impact.

On the question of project design, it is far from clear what theoretical model underpins, even implicitly, fisheries aid. As shown earlier, for a long time fisheries aid was dominated by some notion of fisheries development, but since the natural productive limit of fish stocks has long been recognised, it is not easy to know what the outcome of such aid was expected to be, other than the over exploitation that has followed as surely as night follows day. Moreover, even where it is sustainable, it is not clear how an increase in production per se leads to an increase in social and economic welfare.

Our examination (above) of the recent switch towards fisheries policy as the focus for aid reveals that few, if any, projects correspond to an attempt to apply the economic analysis of the fisheries problem.

Why is this? There are probably a variety of explanations, but we hypothesise that the following have been of some importance in practice:

1. Until relatively recently, there have been no role models. International best practice in fisheries policy and management is beginning to emerge through the experience of countries such as New Zealand and Iceland, but much remains to be done to translate this into a viable model for developing countries;
2. Policy-makers find the economics difficult to understand and it has been poorly communicated by economists, who have tended to be more concerned with influencing one another's thinking than getting the basic message of economics into mainstream policy;
3. Partly as a result of point number 2, the policy agenda has been, and in many places continues to be, dominated by other disciplines, especially fish biology or fisheries science, with a resulting overemphasis on the fish stock and now the ecosystem as the objective rather than the constraint;
4. Recipient countries may have no real interest in solving the economic problem facing their fisheries. One possible

reason for this (doubtless among many) is that the political level at which fisheries aid intervenes may be inappropriate or incomplete. More specifically, if the need is accepted to change the way in which success in the fisheries sector is measured, there is likely to be a need to develop appropriate success indicators for line agencies (ministry, agency, etc., depending on the precise circumstances). This is likely to require working with the fisheries ministry (or equivalent) and other levels of government to change the economic perception of the sector and expectations as to what it is capable of delivering to the economy as a whole;

5. Donor countries (or organisations) may have no real interest in solving the economic problem facing developing country fisheries. One of the many reasons as to why this may happen is that donors may prefer to see fish resources as a means of providing direct poverty alleviation, especially in the form of some kind of social safety net. Such an approach raises many further issues, one of which is that even if this approach may be appropriate when rents are small (on the principle that rents are best collected at a level where they matter), it clearly does not provide a general approach to the problem. It would certainly be unacceptable in those developing countries where fish resources are of sufficient economic importance to matter nationally. This approach may also be responsible for the development of a somewhat "romantic" notion of small-scale fisheries as something to be protected for their own sake.

In trying to develop a more realistic vision for aid, Easterly (2003, p. 41) discusses a single project and comes to the conclusion that: "I am glad that some aid dollars can reach some very needy people, some of the time".

The issue of "benefiting some people, some of the time" is an interesting one in the case of fisheries. Clearly in many countries – maybe most but certainly not all – the fisheries sector is small relative to the overall economy. Nonetheless, fish resources are valuable and have the potential to make a difference to social and economic welfare.

An important point is that because of their renewable nature, fish resources, if exploited sustainably, have the potential to provide benefits "all of the time". This is already an improvement on Easterly.

In some cases, fish resources are of sufficient importance that they can also benefit "all of the people, all of the time". Of course, by its very nature, the fisheries sector, like any other sector, can only provide some benefits. But nonetheless, in certain circumstances, we can anticipate "some benefits for all of the people, all of the time".

Consider for example the case of Mauritania, a north-west African country with a small population of around 3 million, a large land mass that is mostly desert and few natural resources. The country's substantial fish resources are therefore vital to its social and economic welfare. During the 1980s, Mauritania developed a somewhat novel fisheries management system as a result of which, at its peak in 1986, some 22% of central government expenditure was financed by

what was effectively resource rentals. Regrettably, for various reasons, but mostly due to pressure on the government relating to structural adjustment, this system broke down in the 1990s. As a result, Mauritania today continues to finance a similar percentage of its central government expenditure through its fish resources, but it does so mainly on the basis of fishing agreements, especially with the EU. Because the EU payment made to Mauritania under this agreement is not a reflection of good fisheries management (i.e. it does not relate to the generation of resource rentals), fish stocks have become over-exploited. Estimates of resource rentals available from the main fisheries strongly suggest, however, that Mauritania could obtain at least as large a return from well-managed fisheries as it does currently from its fisheries agreements (the EU being only one), provided that appropriate institutional arrangements are put into place, as they were in the 1980s.

Mauritania is one example then of a country where fish resources have the potential to offer "some benefit to all of the people all of the time".

In other places, fish resources are insufficient to benefit everyone, and the direct beneficiaries must be identified. The most common choice is to favour those people who happen to be fish resource users at the right time (e.g. when a co-management system, an individual transferrable quota (ITQ) system, or limited licensing is introduced). There is no *a-priori* reason why this has to be the case, but it seems to be the most commonly adopted.

Even in such cases, the key issue is the relationship between well managed fisheries and gross domestic product (GDP). The fisheries sector often has very poor press from a macro-economic viewpoint. The focus on production as a key indicator seems to be leading to a loss of political interest in the marine capture sector, as production has bottomed out and has even begun to fall in many places. As a result, policy has begun to focus on inland fisheries and aquaculture, even in countries such as Mauritania where these sectors have no conceivable hope of ever producing on an equivalent scale to the marine sector.

Moreover, in many places, the fisheries sector either does not appear in the Poverty Reduction Strategy Paper, the key macro-economic strategic framework in many developing countries, or is assigned a marginal role. Perhaps a large part of the problem could be that those responsible for the PRSPs see the fisheries sector only in terms of its problems, and not in terms of its potential.

There are at least two major issues. Firstly, in many cases, the contribution that fisheries make to GDP is assessed only in terms of first-sale landings. Any value that may be added subsequently is assigned to other economic sectors. From a decision-making perspective, however, the amount of GDP that depends on the sustainability of the fish resources is greater than indicated by first-sale landings. Secondly, and probably more significantly in most countries, the contribution of the fisheries sector to GDP is assessed on the basis of current management and exploitation arrangements, whereas the key decision-making variable is in fact the contribution that the

sector could make if it were rationally managed and exploited. Correcting the GDP vision of the fisheries sector for these two problems would help to ensure that the sector is included in the PRSP in an appropriate way. It may still, however, leave the sector marginalised in many countries in terms of potential GDP contribution. Nonetheless, the point would be strengthened that fish resources are something of a cash cow, capable of contributing to economic growth to a greater extent than generally supposed and on a renewable basis. For this to happen, the key issue is to provide an institutional framework that leads to the sustainable generation of resource rents and subsequent wealth. Wilen (2005) estimates that, globally, initial resource rents are in the order of US\$60 billion per annum; but appropriate institutional arrangements could lead to further wealth gains that he estimates to be some 35% of the initial rents, i.e. US\$21 billion, giving a total potential for wealth creation of some US\$80 billion. This, of course, assumes a situation where the world as whole is not starting from zero rents, but with subsidised fisheries. Estimates of the extent of such subsidies are difficult to make and vary, but US\$20 billion per annum seems a minimum estimate. The World Bank (2008), using a slightly different methodology, estimates the initial resource rents to be US\$50 billion per annum.

While such estimates are of clear interest, the key question is how to move the world to a different set of outcomes in its fisheries where such figures are the reality. Economic theory and empirical evidence both strongly suggest that, in the case of fisheries aid to developing countries, the priority should be given to policy and institutions, with the generation and distribution of sustainable wealth on the basis of resource rents as the central issues to be addressed.

FISHERIES AID IN AFRICA – SOME LIKELY FUTURE TRENDS

The fisheries sector is one of the few where quite specific commitments were made at the World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002. Achieving these commitments in developing countries is likely to require increasing amounts of aid, especially as almost seven years after Johannesburg, little progress seems to have been made.¹

There are signs that the trend towards a focus on fisheries policy and institutional support, identified towards the end of the 1973–2001 period, has continued. Some important initiatives are under way, including the Global Environment Fund (GEF) Strategic Partnership and the NEPAD Fish for All initiative.

The structure of aid appears to be moving strongly toward that of multilateral donors (e.g. World Bank, European Union, AfDB), and away from traditional bilateral donors, many of whom now seem to be working increasingly through multilateral agencies.

This change is particularly leading to a rise in the importance of development banks, not only in the multilateral sphere, but also within national aid agencies (for example, in the case of France, Japan and Germany).

The likely increase in development bank intervention is potentially significant. On the one hand, development banks tend to have more influence on macro-economic policy, and may encourage finance ministries and the like to take a more economic view of the exploitation of their nation's fish resources.

On the other hand, a number of difficulties may arise with development bank intervention. Firstly, institutional support is not their principal calling, especially where they are lending money to generate a rate of return. Secondly, they may find practical difficulties in dealing with such support. To begin with, institutional support projects, especially given the limited capacity of many developing countries to absorb such projects, probably require relatively low levels of funding in the low millions of dollars whereas, for a development bank, a US\$5 million project is already very small and may be the lower limit of what is considered feasible.

Perhaps the biggest issue however is whether the development banks can move beyond a problem that has dogged them for years. As argued by Easterly (2003, p. 34): "Although voices have been raised throughout the years against 'pushing loans' and 'moving money' and change may actually have occurred, the continuity of stressing aid volume is more noticeable than the changes". If supporting institutional change provides, as argued, relatively low opportunities for lending compared to, say, building a new fishing port or renewing the fishing fleet, it may be insufficient to stress the alignment of fisher incentives with policy goals as the key to success. There is also a need to consider the incentives of other players.

Of course, development agencies and their staff cannot impose loans on a recipient country, but there are many reasons why recipient countries and their representatives may offer little resistance to "loan pushing". One factor, for example, is the current trend towards periodic debt forgiveness, which creates an obvious moral hazard problem: why be so foolish as to refuse loans, especially if offered on soft terms, when there is a reasonable expectation that they will be forgiven in the future if the country demonstrates an inability or even an unwillingness to repay?

¹ The overarching commitment at the 2002 WSSD was to develop sustainable fisheries. Within this, key objectives are to maintain or restore stocks to levels that can produce the maximum sustainable yield for depleted stocks on an urgent basis and where possible not later than 2015; to monitor and regulate fishing capacity in line with fishing opportunities; to ratify and implement UN and other international agreements; to prevent, deter and eliminate illegal, unregulated and unreported (IUU) fishing; to eliminate progressively subsidies contributing to IUU fishing and overcapacity and to ensure that fisheries policies take into account the needs of transitional and developing countries.

The likely importance of development banks in the near- to medium-term future makes it imperative that the success indicators against which their staff will be judged in their future careers are carefully considered. Assessing staff purely on the basis of the size of their loan book will have predictable consequences.

At the very least, projects should be independently evaluated against the fundamental economic theory of fisheries exploitation in order to determine their likely impacts. Current financial evaluations (at least those we have seen and been involved with) usually involve making assumptions about future catch rates, prices and other economic parameters to demonstrate the financial viability of investments. We are unaware, however, of any case where such evaluations have been undertaken within the context of a bio-economic model, even conceptually, so as to capture the fishery-wide impacts of the investment. Instead, partial models are constructed with, usually implicit, assumptions that important relationships (e.g. between fishing effort and catch) are linear.

Apart from the probable increasing importance of the development banks, the other apparent trend is the rise in new bilateral donors, especially Asian countries that were once aid recipients. Likely candidates include China, India, South Korea and Thailand. It seems that aid from these countries is much more likely to be tied than has been the case with the traditional bilaterals.

Ensuring that fisheries aid in the foreseeable future focuses on those areas where it is likely to lead to an improvement in the performance of African fisheries is not, therefore, going to be an easy task.

PRELIMINARY CONCLUSIONS

The aid project database shows that for the period 1973–2001 African fisheries have received substantial aid. This database is an extremely valuable tool, and there is a clear need to continue to develop it, in particular to bring it and keep it up to date and, if possible, to broaden the information contained in it (for instance, a link to project documents would be extremely useful).

Judged on their own terms, fisheries aid projects are often considered to be successful. However, it is difficult to equate such project-level success with a generalised sustained improvement in fisheries performance, as indicated by SOFIA for instance.

Over the period, by far the most important focus of the projects, at least until 1996 and arguably since then, was fisheries development. However, such a focus, in a context where African fisheries management systems can only be described as weak, seems almost certain to have worsened the over-exploitation of African fish resources.

We hypothesise that the key reason for the disconnect between project level success and sectoral failure is that, by and large, development projects have lacked a solid

theoretical underpinning. Yet, such a theoretical underpinning is provided by fisheries economics.

Towards the end (final five years) of the period covered by the database, given the continuing poor economic performance of fisheries in many African countries, the available data suggest that development aid has been broadened and re-directed towards addressing the underlying constraints – including building institutional capacity to develop and implement appropriate policies for fisheries management and fish trade. As a result, more projects are categorised as fisheries policy, rather than fisheries development.

However, closer examination of the content of fisheries policy projects (judged largely by their titles) leads us to hypothesise that not a single such project was built on the theoretical underpinning provided by fisheries economics. Both theoretical and empirical evidence strongly suggest that until this is done, there is no reason to expect any fundamental improvement in the economic performance of African fisheries (or any others).

It would, of course, be unfair to lay the blame for the state of African fisheries at the aid door. African fisheries policy, like fisheries policy in many other countries, has failed largely because it either has addressed the wrong issues, or it has addressed the key issues in the wrong order. In the first category there has been an excessive focus on production. In the latter, there is now a focus in many countries on increasing the value of fish resources before having any effective mechanism to control exploitation levels.

However, fisheries aid has certainly not helped African countries to modify their fisheries policies in order to improve the performance of their fisheries sectors. Admittedly, the database only covers 1973–2001 and it is possible that there has been a change in focus since 2001 which modifies this conclusion. This issue will certainly be addressed in the case studies. We hypothesise, however, that there has been no sea change over the past few years, and that fisheries projects continue to lack any solid theoretical underpinning.

We conclude, therefore, that the main issue seems to be the need to change the focus of the available fisheries aid budgets and to bring them far more firmly in line with the theoretical underpinning provided by fisheries economics. It may also be the case that the current level of development aid is inadequate, but this is difficult to assess on a global basis.

The key requirement seems to be to bring all stakeholders, especially key stakeholders such as policy-makers, resource users and researchers, to understand the economic implications of different exploitation patterns, in particular from the point of view of wealth generation. In this context, recent work by the World Bank (2008) and others, estimating global resource rents, is a useful starting point, but there is a need to build on this work in the development of practical fisheries management systems at the level of fishery management units.

One practical suggestion is that all aid projects should be pre-evaluated against their likely economic outcomes, including a bio-economic assessment, even if this can only be done on a qualitative basis. This might help to guard against over-enthusiastic investment appraisals, which frequently seem to be undertaken using unjustified assumptions of linearity between key variables, and ignoring the dynamics that economic change generates. For example, it is often assumed by non-economists that fishing incomes can be increased sustainably with no impact on the number of fishers.

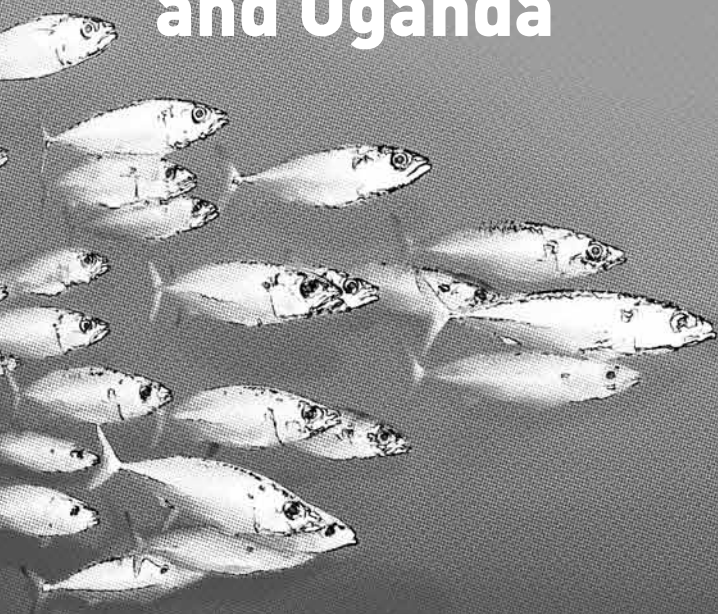
Likely future trends in fisheries development aid are not encouraging. It seems likely that both loan pushing and tied aid may increase over the next few years. In the case of the former, it seems critical to ensure that success criteria for

career staff within development agencies reward the quality of their loan book, rather than simply its size. Tied aid may prove more difficult to deal with. Perhaps the most effective approach is for “untied” aid to assist recipient countries to develop robust fisheries strategies and policies that may then help such countries to guide tied aid to useful areas.

As stressed in the introduction to this chapter, these conclusions are tentative at this stage and should be considered as hypotheses. The project, within which this chapter is the first output, is proceeding to further investigate these hypotheses beginning with the four country case studies. Further reports will become available when the project progresses and the Pan-African Reform Strategy is finalised.

Chapter 2

Fisheries Aid – Case-Studies from Ghana, Senegal, Mozambique and Uganda



Chapter 1 focused on overseas aid in fisheries in Africa in order to set the scene for the overall research. It also generated a number of hypotheses to be investigated through more in-depth country case studies.

The objective of Chapter 2 is to present a summary and a synthesis of the findings of these case studies.

There are three sections to follow. The first presents a brief outline of the approach used, including the choice of countries and the key information collected and used to examine the key study hypotheses which were identified. The second presents a summary of the key findings of each country case-study. The third section identifies a set of key themes or issues which emerged when the case-study findings were compared and synthesised.

STUDY APPROACH

In order to produce the country case studies on African fisheries development aid, a study template was developed against the background provided by the initial paper on African Fisheries Development Aid (Cunningham and Neiland, 2009).

Four country case studies were commissioned, each with a particular set of characteristics reflective of the wide diversity of fisheries in Africa, and with perceived different experiences in relation to development aid as follows:

- Ghana – an Anglophone country in West Africa with significant marine and inland fisheries, which has not received significant levels of fisheries aid;
- Mozambique – a Lusophone country in southern Africa with significant marine fisheries, and a major fisheries aid recipient in recent years;
- Senegal – a Francophone country in West Africa with major marine fisheries, and also a significant recipient of fisheries aid;
- Uganda – an Anglophone country in east Africa with major inland fisheries, and a recipient of some fisheries aid.

Using the above-mentioned template, the commissioned authors from each country were asked to collect relevant information and to synthesise this accordingly into a short report with accompanying appendices containing more detailed information.

Initially, the study template focuses on building a description of the country and the fisheries aid provided (sections 1-3). Following this, the fisheries performance, macro-economic context and the national fisheries policy or strategy is described (sections 4-6). Next, the specific nature of fisheries aid is examined (how fisheries aid projects are formulated) and the performance and impact of aid is described (sections 7-8).

Section 9 is critical, focussing on the role of the economic theory of over-exploitation in fisheries, which is used to set up a key hypothesis for the study. It is hypothesised that the weak performance of fisheries and associated aid is attributable to the lack of an underpinning theoretical

framework during project formulation. It is emphasised that economists have had a robust theory as to why fisheries have been overexploited since the 1950s. According to this theory (supported by an increasing amount of evidence), unless the issues raised by the economic analysis (in particular free and open access and resource rent) are addressed, it will not be possible to effect a sustainable improvement in the benefits obtained from fish resource exploitation; and worse still, such benefits are more than likely to decline over time. For each country case study, where possible, the extent to which projects address the issues raised by economic analysis is assessed.

Section 10, the final section, presents the outlook for the fisheries sector, including fisheries policy, fisheries project proposals, donor involvement and sector needs.

NATIONAL CASE-STUDIES – MAIN FINDINGS

The main findings of each of the country case-studies are presented below in the following order – Ghana, Senegal, Mozambique and Uganda. A more detailed account of each case study is presented in **Appendices 1-4**.

Ghana

In Ghana, the fisheries sector currently does not receive any assistance in the form of overseas aid. It can also be said that previous aid-funded projects have failed to mainstream change in management and planning at national, regional and district levels. Future assistance is likely to be in the form of support to the Ghana Poverty Reduction Strategy (GPRS) and other development plans that overlap with the sector.

Of the eight fisheries aid projects since 1989, only DFID's Sustainable Fisheries Livelihoods Project (2002-2006) appears to have addressed the critical issues of institutional capacity and fisheries management directly.

A further three projects attempted to develop processing or aquaculture infrastructure and two others represented inventories or frame surveys of the sector and the stocks. With respect to the policy process, the FAO funded the Formulation of Fisheries Policy for Ghana (2006-2007) which went on to inform the National Fisheries and Aquaculture Policy (NFAP) (2008).

The following three projects made some attempt to improve the economic performance of the sector:

1. The World Bank Fisheries Sub-sector Capacity Building Project (FSCBP) – 1996-2002;
2. The Integrated Development of Artisanal Fisheries Project (IDAF) funded by the United Nations Development Programme (UNDP) – 1989-1998;
3. The FAO/DFID Sustainable Fisheries Livelihoods Programme (SFLP).

The emphasis of these projects though was capacity building, either within the Department of Fisheries, or with respect to the quality of the fleet in the marine sub-sector, or more selective fishing equipment at Lake Volta.

Overall aid to the fisheries sector has been limited, relative to agriculture and other sectors, and there has been limited cross-over with broader government-led rural development programmes that have tended to target increased agricultural production in the Volta Region, for instance.

The Long-term National Development Plan (2008-2015) generally acknowledges the poor economic contribution of the fisheries sector (at least in macro-economic terms). The government expects the fisheries contribution to agriculture GDP to improve with subsidy and external assistance, but the World Bank (2009)² has demonstrated a reduction in the sector's profitability with increasing investment.

With respect to fisheries, Ghana's second PRSP (2006-2009) has changed emphasis from poverty reduction to growth and wealth in the fishery sector, but it also places greater emphasis on technical capacity building and aquaculture. The control of fishing effort, as well as monitoring, control and surveillance are also priorities, but it is unlikely that there is the capacity to make fisheries management decisions based on economic criteria. Overall, the GPRS represents an "agriculture-led industrialisation strategy, including fisheries, aimed at achieving middle income status by 2015".

The EU Country Strategy Paper (2008-2013) commits to the GPRS and identifies the food security role of Ghana's fisheries, but stresses the need to revise national policy and develop management institutions in line with scientific data and changes in the sector. This again emphasises monitoring, control and surveillance.

Current overcapacity in fishery is partly the result of a series of policies since the Economic Recovery Programme (1984). The demand for foreign exchange led to massive investment in modernising the industrial fleet, but the effect was a decline in production (United Nations Industrial Development Organisation (UNIDO), 1994)³.

The artisanal marine sector has also been heavily subsidised, in this case with respect to fuel and other inputs and, according to the report, this is also likely to have impacted stocks.

The 2008 NFAP is yet to be adopted by the new government but was drafted in relation to a comprehensive economic evaluation of the sector, conducted by the World Bank. The report states that fishery generates in excess US\$1 billion per annum but is likely to represent a net drain on national wealth when subsidies, management costs and ODA are considered (World Bank, 2009)⁴.

² World Bank. 2009. *Revitalising the Ghanaian fisheries sector for wealth and sustainability. Scoping study (draft)*. Prepared for the Ministry of Food and Agriculture. 28 pp.

³ United Nations Industrial Development Organization (UNIDO). 1994. *Pre-investment Study for the Ghana Fish Industries Investment Programme DP/GHA/92/007 Final Report. Volume 1. Consolidated Report Prepared for the Government of Ghana: Vienna May 1994*.

⁴ World Bank. 2009. *Revitalising the Ghanaian fisheries sector for wealth and sustainability. Scoping study (draft)*. Prepared for the Ministry of Food and Agriculture. 28 p.

There are four strategies within the NFAP, two relating to fisheries management and the performance of management institutions and two relating to processing and aquaculture.

At the same time, the World Bank-funded review, mentioned above, has revealed poor sustainability of co-management structures established under the FSCBP and SFLP projects, with only about 25% still functioning.

Disappointingly, there is little evidence that project findings have informed the policy process. DFID's Poverty and Post Harvest Fish Utilisation Project developed tools to assess fisheries-related livelihoods to inform the management strategies and development plans with government, Non-governmental Organisations (NGOs) and research institutions, but there is no indication that such tools have been applied.

Overcapacity and the need for regulation appear to be critical in the sector. The artisanal sub-sector represents about 80% of total catches, but according to the report the fleet is largely unregulated and the sub-sector is *de facto* open access. About 71% of marine stocks and the inland fishery of Lake Volta show signs of over-exploitation and Nunoo and Armah (2008) believe that this stems from the failure to apply research-generated data to management and the problem of open access⁵.

Both donor support and national planning have tended to emphasise capacity and infrastructure over management, and Ghana has lacked a strategic vision for its fisheries, relying instead on a series of fisheries decrees and bylaws.

A SWOT analysis reveals that while Ghana's fisheries contribute greatly to employment (approximately 2 million individuals), international trade (US\$86 billion) and food security, weak fisheries management and enforcement have led to illegal methods and overfishing. However, Ghana does possess good research institutions with experience in fisheries management issues, and socially legitimate local level institutions have the potential to take on new management roles.

There are currently about 38 development partners involved with agriculture sector projects. In the fisheries sector, the World Bank appears to be playing a leading role.

The new World Bank loan-funded West African Regional Fisheries Programme (WARFP) intends to maximise economic returns from fisheries within seven West African partner states. The World Bank has supported the initiative by drafting the Revitalising the Ghanaian Fisheries Sector for Wealth and Sustainability report which has shaped Ghana's fisheries development plan for 2009-2014.

The US government is about to support a collaboration to address fisheries governance issues in the western region, with particular reference to conflict associated with the artisanal sub-sector and stock depletion.

Major donors, including the World Bank, are looking for a more balanced strategy that puts the emphasis back onto

proactive management of marine and inland fisheries, rather than infrastructure and aquaculture.

Senegal

The fishery sector has been a major driver of growth since the 1970s when ODA was first applied to build capacity and increase production through subsidies and the motorisation of the artisanal fleet. This expansion occurred in the absence of a coherent policy framework for fisheries management until the mid 1990s when declining productivity led to the formulation of the 1998 Fishery Master Plan and new Fishing Code (Law No 89-32). The code was innovative in that it created joint government-industry fisheries management councils, and utilised fisheries management plans as tools for sustainable management.

The decline in the sector has continued, however. In 2000, the value of the demersal catch fell 40% from 1999 levels, and there was a 29% drop in volume of exports. The overall industrial catch has fallen 50% since 1997.

The decline led to a national dialogue on fishing and aquaculture in November 2000 which resulted in the drafting of the Strategy for Sustainable Development of Fishing and Aquaculture. The strategy was later reviewed through an evaluation exercise conducted with donor agencies in 2004. The result was a more focused approach that identified distinct themes and roles for the development partners. However, the weak capacity of government to co-ordinate and manage interventions has limited the impact of this strategy.

Senegal currently receives ODA from numerous multilateral and bilateral partners, with the EU, World Bank and the Japanese Co-operation being the major donors in the fisheries sector. The fisheries sector received only 1.5% of total ODA in the period 2000-2006 (50,142 billion CFAF).

The international donors have very specific areas of interest and *modus operandi*. Bilateral aid from the Japanese, Spanish and French agencies has focused on port infrastructure and processing capacity. The EU has played an important role in larger projects such as the 3 billion CFAF 'Petite Côte' which continues to support the artisanal sub-sector.

Fisheries policy is broadly coherent with the PRSP II (2006-2010), and is expected to contribute directly to Theme 1 (wealth creation for pro-poor growth). However, policy targets do not seem realistic, or to reflect the need to control fishing effort and capacity. From 2008 for instance, "the pace of growth in the sector would reach 10.6% on average over the 2006-2010 period, compared to an average of 1.9% over 2004-2006".

⁵ Nunoo F. K. E. & A. K. Armah. 2008. Reconciling Ghanaian fisheries with conservation by minimising impacts of continuous overfishing in the country's waters through science-based-participatory management. p. 601-608. (In: J. L. Nielsen, J. J. Dodson, K. Friedland, T. R. Hamon, J. Musick, & E. Vespoor (eds). Proceedings of the 4th World Fisheries Congress. American Fisheries Society, Symposium 49, Bethesda, Maryland.)

The Accelerated Growth Strategy (AGS) of 2005 was intended to provide a framework to promote growth across sectors. Fisheries are perceived as one of five high potential sectors and the AGS acknowledges:

1. Past overinvestment and resulting overcapacity in the sector;
2. The need to focus on management rather than production;
3. The need to maximise economic rents in line with biological limits.

The Sectoral Policy Document (Fisheries Policy) of 2007 is consistent with the PRSP II and the AGS, and sets out the conditions within which fisheries projects and programmes are intended to contribute to overall national development goals. Three specific project types are identified:

1. Infrastructure development and technical support;
2. Institutional support (management capacity);
3. Environmental enhancement or protection (marine protected areas, etc.).

In terms of specific development projects supported by aid, the National Registration Programme (2002-2008) attempted to address the burgeoning artisanal sub-sector. It was supported by the Swiss Co-operation, the Spanish Co-operation and the World Bank, and was intended to assess and control the size of the artisanal sub-sector.

Furthermore, a programme for the computerised registration of the artisanal fleet was developed to control their number and the access to resources in the artisanal sector. It was implemented with the support of development partners, in particular the Swiss Co-operation, the Spanish Co-operation, the World Bank and the European Union.

The main project goals were full public acceptance of a new chip card registration, the electronic registration of all artisanal vessel-type boats and the creation of a comprehensive database. However, by 2009 only 10.9% of the artisanal fleet had been registered. The full registration of the artisanal fleet is still considered a necessity for a comprehensive system of fisheries management.

Three large fisheries management plans were operating in 2008:

1. The Integrated Marine and Coastal Resources Management Project (GIRMaC) for white shrimp fishery, funded by the World Bank;
2. The Sustainable and Joint Fisheries Management Project (PGDPP) for deepwater shrimp and hake fisheries, supported by the French Development Agency;
3. The COM STABEX programme for octopus management, funded by the EU.

The purpose of these projects fits well with PRSP II and AGS, but to date all three projects have failed to implement any management plans.

The performance of the projects and programmes, focused on

supporting infrastructure and intended to meet the national demand for fisheries products, is well below expectation and production has failed to meet the deficit in national supply.

Project formulation has largely been dictated by the international donors, each of which has its own mode of operation and area of interest. In general, ODA has more often been directed at physical interventions than at supporting monitoring control and surveillance (MCS), research or planning, which are required for a rational system of fisheries management. In summary, badly-formulated projects and programmes are largely responsible for the overcapacity and under-performance of the sector.

A SWOT analysis identifies a strong and well-supported artisanal sub-sector that supplies important local markets, but there are significant institutional weaknesses within the sector as whole. These include a lack of inter-agency co-ordination, poor attention to overall national and sectoral objectives and strategy and limited analytical and MCS capacity within the sector.

Mozambique

Although Mozambique does not possess the productive fisheries of the up-welling areas of West Africa, the available aquatic resources do support large artisanal, semi-industrial and industrial fleets. It seems likely that the overall contribution of the sector is underestimated in terms of catch, employment and the economy. The industrial sub-sector contributes more than half the total value of production through demersal species and crustaceans, but represents less than 2% of those directly employed in the sector. It is also estimated that fishery currently contributes 3% of national GDP.

Fisheries aid from 2000-2008 amounted to over US\$142 million. The major donors were the International Fund for Agriculture Development (IFAD), the Norwegian Agency for Development Cooperation (NORAD) and AfDB. Over half the total aid was directed at the artisanal sector, but projects involving institutional development (21%) and port infrastructure (19%) also represented an important share of fisheries ODA. The proportion of total development aid directed at the fisheries sector declined from 11% to 6% in the period 2005-2007.

Compared to many other countries, Mozambique's Fisheries Development Policy does correspond with broader development objectives enshrined in the National Development Plans and the Government Five-year Programme (2005-2009).

It is notable that the political and socio-economic significance of the artisanal sub-sector and the Sofala Bank shrimp fishery is reflected in the fact that they have their own strategic plans.

According to Thorpe (2005), Mozambique's two PRSPs scored medium-low and medium-high in relation to the inclusion of fisheries, and there is an overall "high level of vertical coherence with umbrella policies". The current PRSP (Action

Plan for the Reduction of Absolute Poverty – PAPRPA II) aims to increase the standard of living within fishing communities and to increase fish supplies to the domestic market.

The World Bank CAS does not outline fisheries-specific strategies, but does acknowledge the overall macro-economic contribution of the sector. The EU Country Strategy Paper 2008-2013 refers to fisheries only in relation to a tuna fisheries agreement.

The new Fisheries Master Plan (2010-2019) places great emphasis on poverty reduction and the socio-economic role of the national fishery, but it is also explicit about the need to capture rent from the fisheries, and to optimise social and economic returns through effort control. Special emphasis is placed on the potential role of the artisanal and semi-industrial sub-sectors in meeting these objectives. It is suggested that revenues are lost to foreign vessel owners and that the industrial sub-sector causes the greatest ecological impact.

The Sofala Bank Shrimp Fisheries Plan (1997) is also indicative of this approach, and demands an industrial sub-sector “providing a maximum economic net benefit ... in a framework of strict restrictions on fishing effort”. To recapture these national assets, the plan proposes reducing fishing effort, building capacity in the management institutions and increasing the knowledge base through research.

Approximately 65 fisheries development projects operated in the period 2000-2008. About 20 of these provided support to the artisanal sub-sector, and a further 24 provided capacity building support to management institutions.

The largest single project was the Rehabilitation of Maputo Fishing Port. The Nampula Artisanal Fishing Project (IFAD) and the Sofala Bank Artisanal Fishing Project (IFAD and NORAD) were both important projects, wide in scope, but both omitting concerted efforts to regulate effort and build management capacity.

Despite this, the Fisheries Master Plan has formed the basis of donor involvement and the government of Mozambique has drawn on donor support in an effort to implement the plan and the PRSPs.

The projects that provided support to the artisanal sub-sector were particularly well-aligned with national policy. According to PROFISH, the Programme for the Development of Small-scale Fisheries (PESPA) is particularly well-aligned with the government’s Five-year Programme and the latest PRSP.

International donors tend not to acknowledge the economic potential of the fishery sector, or focus only on technical aspects (e.g. NORAD, the Iceland Development Agency (ICEIDA), and IFAD). Such agencies have rejected national strategies for integrated fisheries development which emphasise, for instance, a role for the artisanal sub-sector.

Uganda

Development assistance has been provided to Uganda to support the improved management and productivity of fisheries for at least the last 30 years.

Fisheries policy and expenditure was guided by Uganda’s PRSP (the Poverty Eradication Action Plan (PEAP)) until 2008, and is being replaced by a five-year National Development Plan (NDP) with the central theme being Growth and Employment for Prosperity. Although the modernisation of the agriculture sector is the central focus of the NDP, the fisheries sector has become much better represented since the first draft of the PEAP in 1997, and the Department of Fisheries Resources (DFR) has been well placed to inform the development of the NDP through its broad consultations with government, private and local fisheries stakeholders during the development of the National Fisheries Policy and Fisheries Sector Strategic Plan.

Fisheries management is the remit of the DFR within the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), but fisheries management at the local level is undertaken by fisheries officers employed by local government as the result of Uganda’s policy of decentralisation since the early 1990s. Local government has no powers to make decisions regarding the allocation of revenues, however, which is likely to undermine the economic viability and management function of local institutions.

There have been at least 48 fisheries projects in Uganda since 1976, ranging from relatively small and short-lived efforts to promote local aquaculture, to attempts to support co-management and capacity building within government. A further 10 projects operated at a regional level with neighbouring countries at Lakes Victoria, Albert and Edward.

Although some of the larger and longer-lived projects, such as UK DFID’s Integrated Lake Management Project, have had a management focus, many projects since 1997 have had a technical capacity focus. Seven projects have had the explicit objective of increasing production, improving post-harvest processes and increasing supply for export, with little or no attention to control of effort or other management issues. Five projects have specifically attempted to address (or at least explore) overfishing and other management concerns through co-management and capacity building in monitoring and compliance. Only three projects have attempted to improve or address fisheries policy directly⁶. Of the other projects, two had social development and health objectives, and seven others were associated with assistance to aquaculture.

At least 17 donors have provided fisheries aid since 1976 with the EU, World Bank and China providing the greatest and most consistent support.

⁶ Integrated Lake Management Project – DFID (1999-2004), Policy Analysis, Advocacy and Rights Awareness Project – DFID (2005-2008) and Support to Updating and Harmonising of Uganda’s Existing Fisheries Legislation – FAO (2009).

The World Bank has provided support principally via the Lake Victoria Environmental Management Programme (LVEMP), co-supported by the GEF running to 2016. The majority of this work has concerned fisheries management with support to capacity building, the formation of the Lake Victoria Fisheries Organisation and the introduction of Beach Management Units (BMUs) for co-management.

The EU has supported fisheries projects in Lake Victoria since 1984. EU research projects culminated in the 2003 Implementation of Fisheries Management Plan for the Lake. The overall objective seems to be to secure Nile perch production and export, largely to the EU market.

DFID has supported the fisheries sector from the 1990s to the mid 2000s through small-scale aquaculture projects and the Integrated Lake Management Project (ILMP), which was intended to explore policies and legislation with the DFR for co-management for Lake George and Lake Kyoga.

Other significant donors include ICEIDA, which has been providing support to promote quality assurance, and the AfDB, which funds the largest single fisheries project providing support to landing infrastructure and aquaculture. These donors support the two projects currently operated through the DFR.

Agriculture receives just 6% of total ODA and fisheries receive only 0.02% of this sum.

The sector provides up to 2 million associated livelihoods and up to 2% of national GDP, but capture fisheries are in decline and Nile perch and many Tilapia species are overexploited in the lakes. Exports are significant (US\$115 million internationally and US\$33 million regionally), but are also in decline. The fishery sector suffers from the use of illegal methods and fishing equipment, and increasing catches of immature fish.

The DFR has helped to stress the significance of overfishing and illegal activity in causing declines in catches in the development of the new NDP which will replace the PEAP.

The PEAP acknowledges the problems of overcapacity within the sector, and emphasises the potential role of co-management institutions to manage, monitor and enforce rules at lake and beach fisheries. There is, however, no evidence that inclusion of fisheries in the PEAP has led to any increase in government or donor support, or has influenced the nature of donor support.

The Uganda Joint Assistance Strategy (2005-2009) makes little reference to fisheries beyond the need to increase exports and productivity.

The EU currently provides support to the sector via the implementation of a Fisheries Management Plan to be completed in 2010.

Other relevant policy includes the Plan for Modernisation of Agriculture (PMA) which aims to promote aquaculture and improve infrastructure. There is little reference to fisheries in

the 2005 Rural Development Strategy.

The 2004 National Fisheries Policy (NFP) sets out to secure the long-term future of fisheries and their contribution to the national economy, but its key strategy to achieve this is the establishment of co-management institutions. Planning, policy, information management and research are acknowledged as important, but many of the practical recommendations feature investment in aquaculture, the post-harvest sub-sector and marketing to maximise the volume traded. Overall, the NFP reflects the PEAP strategy and focus.

Fisheries projects supported by ODA mainly fall into two categories: 1) those centred on the lakes, especially Lake Victoria, and with a focus on livelihoods, poverty reduction and sustainability via co-management and 2) smaller projects promoting aquaculture or health in fishing communities.

The Fisheries Development Project supported by AfDB identified a potentially greater role for fisheries exports relative to other sectors and emphasised infrastructure for quality assurance and the promotion of aquaculture.

In summary, few of these projects directly confronted the issue of over-capacity. However, DFID's ILMP did attempt to limit the number of licensed canoes at Lake George and the FAO has supported the Lake Victoria Fisheries Organisation to implement the Regional Plan of Action (RPOA) for the Management of Fishing Capacity at Lake Victoria. The RPOA adopts a precautionary principle to maintain 2006 levels of exploitation of the Nile perch and the elimination of illegal practices, but the plan has not yet been fully implemented.

With respect to policy, the FAO project Support to Update and Harmonize Uganda's Fisheries Legislation (2009) is the most direct attempt to engage with the policy process and sets out to consider anomalies with Kenya and Tanzania.

The performance of these projects, as described in the evaluations, is mixed. LVEMP rates its progress with respect to fisheries management as "moderately satisfactory", acknowledging the poor sustainability of new institutions and the limited uptake of new knowledge. The government of Uganda is also criticised for delaying disbursements and of failing to implement a fish levy trust, which may have built financial sustainability.

ILMP is reviewed favourably with respect to "facilitating processes for fisheries management", but was challenged to provide strategies to upscale and maintain progress. Legislation developed during the project remains in place, but the Beach Management Units and the Lake Management Authorities are barely functioning. Local fisheries taxation as proposed within the 2004 Fisheries Bill may have assisted local management institutions, but these changes were never introduced.

The ILMP evaluation acknowledged that meaningful and lasting change in management takes much longer than the normal project timeframe, and that this should be part of a broader political commitment to co-management. This report

also called for economic research to determine the optimal economic benefits from the fishery and the implementation of the plan.

LVEMP, ILMP and the FAO RPOA Capacity Project have addressed the issue of over-exploitation and capturing resource rents to a limited extent.

In addition, the projects addressing policy issues may have developed government capacity to critically review current legislation and structures.

LVEMP has succeeded in establishing a Fish Levy Tax Fund in Tanzania and Kenya, which is extracting rent via Nile perch exports. In Tanzania, the fund supports staffing for monitoring, control and surveillance, but no such fund has been introduced in Uganda.

ILMP attempted to address licensing of canoes at Lake George, but illegal entrants continue to operate. The project reviewed the complex system of fisheries taxation and the extent to which revenues are lost to management institutions.

The RPOA recommended limiting fishing effort on Nile perch to 2006 levels, but all Lake Victoria states are more concerned by the impact of illegal fishing on Nile perch stocks than overcapacity *per se*. The RPOA contains recommendations to limit effort, but a lack of funds may lead to limited progress.

The government of Uganda has invested in enforcement and support to aquaculture, but this is not consistent with the National Fisheries Policy or the recommendations of the projects. A SWOT analysis identifies the need to develop compliance, build in financial viability of local management and to implement a National Plan in line with the RPOA for Lake Victoria.

The DFR will continue to attempt to increase production through a new partnership with the AfDB, although the National Fisheries Policy does call for better licensing, regulation and controls to limit overcapacity.

KEY THEMES

In this section, a comparison is made between the findings of the four case studies presented above. The aim is to identify the major themes which have emerged concerning the use of fisheries aid in Africa. In particular, the key hypothesis which underpins the overall study is considered, namely that the weak performance of fisheries and associated aid is attributable to the lack of a suitable underpinning theoretical framework during project formulation. It is suggested that economics, and specifically fisheries economics, is the most appropriate framework. For each country case study, where possible, the extent to which projects address the issues raised by economic analysis has been assessed, and the overall findings across the case studies are considered in this section.

The following themes emerged in the case studies.

Benefits

The potential and actual contributions of the fisheries sector to society are recognised in all the case study countries, and have been for many years. However, the benefits have usually been characterised in terms of activities (e.g. employment, income) and associated products and outcomes (e.g. food supply, community stability). This particular perspective provides a background to fisheries policy development. Unfortunately, it remains a partial view, since other forms of benefit (e.g. wealth and resource rent) are excluded.

Fisheries policy

Fisheries policy has been influenced by international development narratives for natural resources. Policy approaches have evolved accordingly in three general phases: development or production focused (to increase fish landings); conservation focused (as fish stocks became overexploited) and management focused (to create sustainable fisheries and benefits and to rehabilitate overexploited fisheries), but it is clear that there is considerable overlap, and the different approaches, when working simultaneously, can create problems such as policy conflict and lack of coherence.

Volumes of aid

All the countries have received significant volumes of aid from donors. The aid targets have been influenced by the prevailing development narratives (as mentioned above), with a particular focus on infrastructure (e.g. fishing harbours, fishing fleets) initially. More recently, the focus has been on capacity-building and institutional development in general, in an attempt to address the need for more effective fisheries management. However, it is not always clear, based on the results of the four national case studies, why the aid investment choices were made or changed over time.

Performance

The performance of fisheries aid is difficult to discern precisely in all the case studies. Overall, there are concerns that project implementation has been weak, and that the outcomes desired have not been achieved. In all four case study countries, in general the fisheries are currently characterised by over-exploitation, both economic and biological, which suggests that the overall contribution of fisheries aid aimed at fisheries development has not been very successful.

Performance factors

The factors that have affected the overall performance of the fisheries sector in each case, and have affected the impact of aid specifically, show many commonalities. At a higher level, fisheries policy has often not been well-developed, and has been slow to evolve in line with new opportunities and threats presented to the sector. At the implementation level, fisheries management has been generally weak, with many fisheries operating as regulated open access systems, leading inevitably to both biological and economic over-exploitation.

Macro-economic policy

Focusing specifically on the important link between national macro-economic policy and the fisheries sector, the four national case studies appear to reveal that it is only in recent years that governments have been concerned with ensuring that there is a situation of “joined-up” policy. In the past, it was unclear whether fisheries policy was designed and implemented with reference to national economic policy and objectives, but there is some doubt as to whether this was the case. In other words, the precise economic contribution of the fisheries sector was not assessed or used as a basis for policy development, or within the context of national economic planning.

Fisheries management

In all four case study countries, effective fisheries management systems have not been established, and the problems associated with regulated open access have emerged, including weak economic performance, declining stock levels and social instability. Fisheries aid has increasingly been directed at attempts to improve fisheries management through institutional capacity-building, new initiatives on co-management and MCS schemes. However, there are still concerns about the likely impact of these new approaches based on recent performance.

Central hypothesis

The central hypothesis to be tested by the study – that the performance of fisheries aid (linked to the performance of the fisheries sector) has been constrained by the lack of an appropriate theoretical underpinning for policy and project design – is supported by the case studies. It is evident that fisheries policy design and implementation has been rooted in the natural sciences (fish biology in particular), and that other disciplines have been little used. Most importantly, economic analysis has been lacking, and it is now increasingly understood worldwide that the use of economics-based

approaches for policy development are essential for improved fisheries performance.

Future potential

All four national case studies indicate that although the fisheries sector of each country is experiencing some difficulties at present, there is also important potential to be exploited in the future, mainly through improved fisheries management of exploited stocks. Each country has, in recent years, developed new fisheries policies (or is in the process of doing this) which is more directly linked to macro-economic policy and poverty reduction strategies.

Although steps have been taken to address fisheries policy in all four countries, it is also evident that the use of fisheries economics as a core and underlying theoretical framework is minimal. The use of a science-based policy approach and the associated conventional top-down government (command-and-control) fisheries management system remains widespread and calls into doubt, based on international best practice, the ability of policies based on this approach to deliver the full potential offered by fisheries in terms of optimal and sustainable economic, environmental and social outcomes.

Fisheries reform

The relationship between fisheries reform (with the aim of realising national fisheries potential, as mentioned above) and aid in all four case studies, is not always clear. The objectives and rationale behind many projects and programmes have not always been well-understood by the stakeholders involved. At times, projects have been implemented without a clear link to either fisheries policy or national macro-economy policy. Fortunately, there is growing recognition for the need for clear, objective-driven decision-making and the involvement of stakeholders at all levels of fishery in policy design and implementation, including the priorities for aid and the manner in which it is delivered or used.

Chapter 3

Improving Fisheries Aid at Base Level – Viewpoints



The objective of this chapter is to examine the factors which have affected the performance of fisheries development aid, and consider how they might be addressed in the future. Using the information and the results of the research contained in the previous two chapters, this chapter focuses on the key issues which should underpin the definition of a set of principles to be used in fisheries development aid in the future. The principles are set out in Chapter 4.

In order to capitalise on national, international and specifically African experiences concerning the use of aid in fisheries, a workshop was organised in Accra, Ghana in June 2010 as part of the project. The workshop participants included project team members, other relevant experts and representatives from international, regional and national organisations (see Appendix 5).

The workshop examined the project findings to date, and then focused on a discussion of issues and suggestions for establishing a set of key principles through a combination of break-out and plenary sessions. The open and wide-ranging discussions which ensued enabled a significant amount of “on the ground” experience to be captured from the experts involved, and particularly from the representatives of national and regional organisations in Africa.

KEY FACTORS IDENTIFIED

Governance

The governance context of a country was one of the first to be identified as a major factor affecting fisheries aid performance. Although it was recognised that the term “governance” can be defined in different ways, it was generally accepted that an enabling environment at a national level is essential to ensure that aid investments in fisheries will be successful in the long-run.

At a fundamental level, good governance is associated with a high level of accountability, transparency and participation in decision-making relating to all interactions between different stakeholders and in the use of aid investment. In this context, the importance of the issue of corruption and how this impacts on fisheries development and aid investments was also recognised, although information and hard data are scarce and notoriously difficult to obtain.

Under conditions of weak governance, fisheries usually show high levels of IUU fishing, and it has been estimated that the loss of benefits (lost catch and secondary benefits) to African coastal states can be valued in terms of millions of dollars. This issue raises many questions with regards to the use of aid: How can aid be used to combat this problem? What preconditions should exist before aid is invested in a situation of weak governance? How will the net benefits redeemed from better governance be used and do they represent a direct substitute for aid?

Political will

Another major factor which will affect aid investment in fisheries is the extent to which there is political will or

support for the sector. In Namibia, for example, in the period immediately after independence in 1990, the fisheries sector was recognised as important and valuable for the national economy. The high level of political support received at this time contributed to the success of aid-funded technical interventions relating to fisheries development and management. However, in many other countries, the extent to which the potential value of the sector and the contribution it can make to national development are fully understood or appreciated by senior politicians and policy-makers can be questioned.

In situations where this assessment or appreciation is lacking, for whatever reason, it is hardly surprising that there is a lack of political support for major aid investment. In addition, the fisheries sector may be considered a low priority compared to other sectors of the economy such as industry, services or agriculture. Politicians may also be faced with difficult choices and decisions in order to secure aid investment funding for a particular development and management approach.

Politicians may be particularly unwilling to propose a “pain for gain” strategy to their constituents. For example, the rehabilitation of a fisheries sector may require restructuring and withdrawal of vessels and crews as part of a strategy for improved management. Such an approach is unlikely to be popular with fishermen or the fishing industry in general and will carry a high level of risk for politicians.

Of course, political influence may also have a negative impact on aid-funded project implementation. It was suggested that political interference had adversely affected two recent projects in Africa – the EU-funded Lake Victoria Fisheries Management Project and the Lake Malombe Participatory Fisheries Management Programme (PFMP).

Policy framework

The policy framework in place must be adequate to guide aid investments. Unfortunately, in many countries fisheries policy is often outdated, inflexible and inappropriate, and does not provide a good basis for the development and management of the sector.

A weak policy framework can be vulnerable to various threats. In some West African countries, for example, attempts to manage fishing effort at a national level have been undermined by the signing of external access agreements, where only a limited overall assessment of the likely effects of allowing additional fishing activity through this route were done beforehand. In fact, the coastal states in question should manage both national and external fishing activity under one management system.

Interestingly, policy weaknesses at a regional level can also have negative impacts. The poor co-ordination of capacity reduction programmes can, for example, lead to the displacement of overcapacity into other countries’ fisheries. Aid investments must be carefully introduced in these situations in order to avoid exacerbating the problems associated with a weak policy and management framework.

Furthermore, policy deficiency at country level can lead to the formulation of projects based on donor preferences, because many developing countries do not have guiding strategies for sector development. Donors have indeed been seen to push their own agendas and preferences, taking advantage of the absence of national development strategies and policies.

Under ideal conditions, project formulation for aid investments should take its lead from national policy objectives and their associated programmes and plans for the fisheries sector. Of course, the fisheries sector must also agree with macro-economic and other policies, as coherence between different policies is an indicator of good governance overall. In Senegal, for example, recent fisheries projects, funded through the French Co-operation, have aligned with the National Growth Strategy.

Choices

Related to the status of the policy framework, is the need to understand how choices regarding the use of aid are made, both in terms of the allocation priorities and the actual level of investment. There is a strong perception, and increasing evidence, that many aid-funded fisheries projects in Africa focus on three areas, namely infrastructure, environmental management and social issues, without taking into account economic issues or focusing on the economic objective of fisheries management. Unfortunately, on the basis of international best practice experience in fisheries management, this is a bad choice, and unless economic issues are dealt with first and foremost, fisheries cannot be managed properly.

From another perspective, the business opportunities provided by the fisheries sector have received limited attention in the debate and decision-making processes concerning the allocation and use of aid. In the long-run, the contribution that the fisheries sector of a particular country can make to economic growth and poverty alleviation, may be seriously constrained by a policy focus underpinned by aid-funded projects, as is the case in Malawi. Such a policy focus attempts to meet only social objectives in the short-run, by maximising production and employment.

Concepts

It is also important to understand how the policy framework for the fisheries sector and the subsequent aid investment choices are determined or underpinned by particular theoretical and conceptual frameworks. Furthermore, choices will be informed by particular analytical approaches. As is the case in the rest of the world, fisheries policy in Africa has been shaped largely by scientific and technological concepts concerning fish stock dynamics, exploitation and management over the past fifty years.

More recently, international best practice experiences in fisheries management have shown the importance of economic approaches. African fisheries experts have voiced concern about the best models for managing Africa’s fisheries in the future, and the need to increase information flows in

this regard. Clearly, the choice of approach will also shape the aid investments.

Participation

The extent to which different role-players and stakeholders within the fisheries sector and society in general participate in decisions on the use of aid was also raised as an important issue.

From one perspective, there is concern that donor preferences in project formulation and design can take preference over those of the recipient country, and that international development banks and agencies may “push” for their own priorities, spurred by particular agendas and incentives. In the recent past, for example, large aid investments in infrastructure and technology might have been deemed successful in terms of the total spend, rather than the long-term development impact, which was probably not always assessed. If assessed, the assessment would probably have occurred long after the investment was made and the project or programme had been completed.

Concerns have also been raised about the relative power balance between different role-players in the negotiation of major international agreements and policy frameworks in fisheries, which might include both commercial (trade) and aid components. In recent years, questions have been raised about the process by which the Economic Partnership Agreements (EPAs) have emerged with the EU, and the extent to which many African countries involved have the capacity to participate in the formulation and implementation of these complex frameworks in a meaningful manner.

In the general context of international fishing agreements, the complexity associated with its analysis, negotiation and implementation (and the net benefits that really accrue to African countries) can be attributed in part to the interrelationships between production objectives, management approaches and development goals, and indeed the role of aid in attempting to support the processes involved.

Capacity

The issue of institutional capacity was also viewed as a critical issue in the allocation and use of aid. In many African countries there is limited capacity within government, at all levels, to deal with international aid. This has, for example, been highlighted in various post-conflict countries such as Mozambique where, although significant international aid was made available to address urgent needs, the countries not only lacked the capacity to co-ordinate the aid originating from different donors, but also lacked the capacity to implement long-term aid-funded programmes and projects.

Project design

The allocation and use of aid through specific projects within the fisheries sector raises many issues. Firstly, there can be no doubt that the quality of the project design will determine the impact of the aid invested. There is evidence that country involvement in project formulation increases the chances of

success in project implementation, as has been seen with the Lake Victoria Fisheries Research Project (LVFRP), for example.

However, concerns have been raised elsewhere that certain stakeholders, especially the private sector, may not be fully included in the planning and inception phases of new aid-funded projects. This may be due to a lack of trust between government and the private sector. Inevitably, the same stakeholders will not be involved in project implementation either, and where they represent a major force within the sector, this can have a detrimental impact on the success of aid-funded initiatives.

Project design in fisheries has also been criticised at times for being too narrow when, in fact, the fisheries sector is usually just one component of a large coastal region or economy, and where the relationship between different components (such as fisheries and industry, agriculture and/or recreation, etc.) also need to be considered from a multi-sectoral perspective.

Learning from past experiences is also pertinent to future project design. The extent to which the performance and impact of fisheries aid projects is adequately assessed has been questioned. Most interventions tend to be assessed in relation to time-bound project or programme objectives and activities. It is doubtful whether such an approach can also measure the contribution of an aid investment to sustainable development. There is a need, therefore, to consider how future investments will be assessed, and how this information will feed back into project design.

Sustainable interventions

The long-term impact of aid investment is an issue of major concern, not only in fisheries, but in relation to the use of aid in general. At the level of programmes and projects, the question must be asked as to whether many aid-funded, time-bound interventions consider if their work and activities will be sustained in future, and related this to whether they include an exit strategy.

In addition, it is wise to consider whether the extent to which the current policy framework and context under which aid investments through programmes and projects are designed and implemented will remain the same, or if changes will occur. Policy scenario analysis can help to describe and predict the likely impact of change. In recent years, for example, African policy-makers have been increasingly concerned about the impact of changes in trade rules at a regional and global level, and the distortions they produce in trade flows.

Co-ordination and coherence

The extent to which there is co-ordination between different role-players involved in the allocation and use of aid can be important in affecting aid effectiveness. There are concerns that the level of communication between the ministry of finance and the fisheries sector is often very limited in many countries. It is evident that agreements with donors are completed at a higher level and are then simply imposed

on the fisheries sector, without an appropriate degree of consultation. Clearly, there is a high risk that such an approach will not enable aid to be used effectively.

There are also concerns about the level of coherence between donor initiatives. In some situations, different donors have identified different needs and proposed different funding packages – all within the same sector. The need for co-ordination and coherence is important in order to avoid unnecessary overlap and waste, and even competition and conflict between different aid-funded initiatives.

Sometimes, however, even attempts to address aid project coherence issues can run into unforeseen problems. For example, where special Project Implementation Units (PIU) are set up, internal issues may arise where PIU members of staff are paid more than other government employees at the same career level. This perceived “financial discrimination” can have a detrimental impact on staff morale and ultimately on project implementation.

ADDRESSING THE KEY FACTORS

A range of suggestions was made concerning the ways in which the factors which affect the performance of fisheries investments or aid investments could be addressed. The following list encapsulates the key points:

- Prioritising fisheries in national strategies;
- Ensuring that fisheries are properly represented in key advisory documents and processes (e.g. NEPAD – CAADP);
- Establishing a set of principles on the use of aid in fisheries that is agreed upon and understood by both donors and recipient countries;
- Establishing a permanent dialogue between key ministries responsible for aid decision-making;
- Ensuring that the private sector, where appropriate, is involved in key decision-making on the targets and the use of aid;
- Building relevant capacity in government regarding the targeting, allocation, management and negotiation of aid in fisheries;
- Considering the fisheries sector from different perspectives in terms of the use of aid (e.g. business opportunities, social functions, environmental management);
- Developing a common vision and its implementation through participation between government, politicians and the private sector. This will take care of the political interventions, private sector involvement and financial discrimination issues;
- Creating national trust funds for the fisheries sector. This will cater for issues regarding funding deficiencies in fisheries management, development, research and sustainability of initiatives in the fisheries sector;
- Considering how aid-funded programme or project design will deal with the range of factors involved that might affect performance, including lessons learnt from the past, and adequate information flow from monitoring and evaluations systems;
- Donors and recipients should consider and agree on how to manage different types of factors as priority criteria (e.g. substantive topics for donors to be aware of; international donor co-ordination management; factors outside the control of a country; links to high level macro-economic goals of a country and factors to control within country).

Chapter 4

Setting Out Key Principles for Fisheries Aid

In the light of the findings of the project, this section sets out ten key principles that might be followed in order to improve the results of aid in African fisheries.

Each of the principles is highlighted with a key question and, taken together, the ten constitute an *aide memoire* and a framework for decisions affecting the use of aid in fisheries. The list is as comprehensive as possible, based on the inputs provided by the fisheries experts from Africa and elsewhere who were involved in the project.

The principles attempt to follow a logical sequence, but there are inevitably feedbacks from one principle to another and there will undoubtedly be further debate in the future as to where the greatest priorities and major factors should be positioned.

At this stage, however, it is hoped that organisations involved in aid decision-making in fisheries will find it useful to consider the ten key questions posed. It is the general view of the experts involved in the project overall that it is important to have answered these questions before applying further aid to the fisheries sector.

KEY PRINCIPLES FOR FISHERIES AID

The first three principles relate to the benefits available from fisheries exploitation. Unless these are documented and well understood, it is difficult to develop an effective fisheries strategy.

1. What are the potential benefits that can be realised from a well-managed fisheries sector and what role will aid serve to unlock these benefits?

The development of fisheries policy, including consideration of the likely role and use of aid as a source of investment, requires a detailed assessment, at an early stage, of the potential benefits that can be realised on a sustainable basis from a well-managed fisheries sector. This will include positive economic (e.g. fisheries wealth, fisheries employment and income), social (e.g. predictable food supply and stable communities) and environmental outcomes (e.g. stable fish stocks). The assessment should consider the fisheries sector from different perspectives in terms of aid use (e.g. business opportunities, social functions, environmental management).

2. How do fisheries management systems take account of international best practice and the central role of resource rent?

Fisheries aid for improved fisheries management system design and performance should be carefully directed and invested based on international best practice. It is evident that proper consideration should be given to the central role of resource rent in fisheries exploitation. This rent is both a benefit and a key part of fisheries wealth, mentioned in principle 1, but it is also a threat under weak management, posing an incentive for over-exploitation. Aid invested in conventional management systems with a non-wealth focus, such as maximising fish landings and

stock conservation, have proven to be unsuccessful in the long-run. It is essential to build on effective management approaches such as wealth-based fisheries management.

3. Is economic analysis used to underpin fisheries policy and the use of aid in fisheries?

The key role of resource wealth means that economic analysis is essential to provide the theoretical and empirical framework for both the design and implementation of effective fisheries policy and in guiding the use and application of fisheries aid.

4. To what extent is the relationship between potential future fisheries benefits, and aid investment in particular management approaches, understood by a broad range of stakeholders?

Understanding the relationship between future fisheries potential and fisheries aid is critical. The importance of the wealth potential of fish stocks has been stressed. This does not necessarily mean that policy objectives have to revolve around this wealth, but careful consideration should nonetheless be given to the benefits and costs of adopting different policy approaches to society, and the associated aid investment needs in the future should be made clear.

Developing and sharing the understanding of the potential benefits of fish resource exploitation will enable governments to place the fisheries sector within macro-economic policy. Once this is done, a coherent strategy can be developed for the fisheries sector, and aid can then be used to assist in its implementation.

5. To what extent is fisheries policy linked to macro-economic policy, and how does this link affect aid investment?

The link between national macro-economic policy and fisheries policy must be established and understood to ensure that fisheries aid is effectively prioritised and used within the overall context of national development. The fisheries sector could benefit, or suffer, from investment in other parts of the economy, and it is important to understand and use this information to avoid duplication or conflict of investment. It is important to ensure that the contribution and role of fisheries is properly represented in key advisory documents and processes (e.g. NEPAD-CAADP).

6. What are the policy objectives and implementation mechanisms for the fisheries sector, and is aid investment guided by this framework?

Fisheries policy should be well-designed, and should provide the future vision and direction for fisheries sectoral development through the clear identification of

policy objectives and implementation mechanisms. An appropriate policy process will consider policy options as underpinned by certain development narratives. The specification of a particular policy direction and associated mechanisms is important in guiding sectoral investments using aid and in avoiding any conflicting investments. By developing a common vision and its implementation through participation between government, politicians and the private sector, political interventions, private sector involvement and financial discrimination issues will be taken care of.

Establishing the way in which the fisheries sector can contribute to key macro-economic goals, in particular economic development and growth, in the fisheries strategy will enable fisheries aid investments to be prioritised and selected.

7. How are fisheries aid investments identified, evaluated and prioritised?

The prioritisation of fisheries aid programmes and projects should be clearly linked and flow from the sectoral policy framework, objectives and mechanisms. Approaches and tools used routinely in project appraisal methodology should be applied to enable a comparison of the likely impact of a particular investment with a different investment (or with no investment). In addition to such an analysis, it is essential that a bio-economic analysis be undertaken, preferably of a quantitative nature, but at the very least qualitative, to ensure that the investment will not have a negative effect on fish stocks.

Stakeholder relationships and institutional mechanisms should also be considered at different levels. For example, by establishing a set of principles on the use of aid in fisheries that is agreed upon and understood by both donors and recipient countries; or by establishing a permanent dialogue between key ministries responsible for aid decision-making; or by ensuring that the private sector, where appropriate, is involved in key decision-making on the targets and use of aid; or by building relevant capacity in government regarding the targeting, allocation, management and negotiation of aid in fisheries.

8. Is fisheries aid investment assessed and evaluated at both the project and sectoral level?

The performance of fisheries aid investments should be carefully monitored, assessed and evaluated. This needs to be done at a project level (i.e. did the project achieve its stated objectives?), but also, importantly, in relation to sectoral policy goals (i.e. did the investment have a positive and desired impact in relation to policy goals?). It is important to consider how aid-funded programme or project design will deal with the range of factors involved that might affect performance and the lessons learnt

from the past, and have adequate information flow from monitoring and evaluations systems. A key issue is exit strategies – fisheries aid is intended to be finite, and a big problem is ensuring that the results achieved are sustainable. The experience of fisheries aid projects and doubtlessly other aid projects too, is that the good results obtained tend to evaporate quite quickly once the aid funding stops.

9. What fisheries aid investments are anticipated and planned for the future?

The performance of fisheries aid investments in the future will depend on the continued development and evolution of fisheries policy and management systems which are responsive and effective in dealing with both the opportunities and threats faced by the fisheries sector over time. Fisheries aid should be part of this dynamic process, with a need to anticipate and plan ahead for likely future investment requirements.

10. Is the link between fisheries reform and aid investment specified and understood?

In many countries, fisheries performance has been disappointing and there is a clear need for change. The relationship between fisheries reform and fisheries aid needs to be well-defined in the future. It is important for all relevant stakeholders to understand the benefits and costs of reform, and the need for aid over time, where appropriate, given that fisheries reform can take decades rather than just years. Donors and recipients should consider and agree on how to manage different factors that affect fisheries performance and fisheries aid performance, as well as its priority criteria (e.g. substantive topics for donors to be aware of; international donor co-ordination management; factors outside the control of a country; links to high level macro-economic goals of a country and factors to control within country).

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APPENDIX

APPENDIX 1: FISHERIES AID IN GHANA⁷

Abstract

The fisheries sector is expected to play a major role in poverty reduction, but faces many challenges, including declining marine and Lake Volta stocks and poor fisheries protection and management. Foreign assistance to the fisheries sector over the years has been modest, especially in the context of fisheries management centred on economic principles and the control of effort. Where fisheries development projects have attempted co-management with new local committees, these institutions have proved to be short-lived, and where new knowledge and management tools have been developed, they have not been widely applied. There remains a need to seize declining fish stocks and productivity for the purposes of poverty alleviation. Currently, there is no direct foreign assistance in the fisheries sector. Further investment in the fisheries sector will therefore support government's policy direction of poverty reduction as enshrined in the Ghana Poverty Reduction Strategy (GPRS II) and other development plans. The National Fisheries and Aquaculture Policy of 2008 is yet to be implemented.

Introduction

Total foreign assistance to the fisheries sector of Ghana has been relatively low, with about US\$16 million distributed between the seven projects in operation since 1997 (Table 1). The larger projects have attempted capacity building within the Department of Fisheries (DoF), in conjunction with the development and support of community-based institutions. A number of smaller projects have provided technical support, especially with respect to post-harvest activity in the marine sub-sector. Generally, projects have failed to result in lasting institutional change, and Ghana's fisheries remain overexploited. Currently, there is no foreign assistance in the fisheries sector.

⁷ This paper is a summary of: Bortey, A. & Nunoo, F. K. E. 2010. African Fisheries Development Aid, Country Case Study No. 1 – Ghana. /n World Bank. 2010. Political Economy of Fisheries Reform: Lessons and Applications for Development Assistance. World Bank Project No. 7150204. Output No. 3.



Table 1: Fisheries projects since 1997

Name of project	Years	Donor	Main themes
Integrated Development of Artisanal Fisheries (IDAF)	1989-1998	UNDP/JICA	Building management capacity at Lake Volta, appropriate gears, data collection and facilities
Icing Project	1997-2000	DFID	Quality assurance through support to canoe sub-sector
Fisheries Sub-sector Capacity Building Project (FSCBP)	1996-2002	World Bank	Capacity building to DoF for inland and marine fisheries
FAO/Nansen Programme	1999-present	FAO/NORAD	Stock assessment and marine survey
Strengthening the Organizational Capacities of Fish Farmer Groups	2002-2003	FAO	Support to aquaculture producer groups
Lake Bosumtwi Restoration and Management	2002-2006	GEF/UNDP	Sustainable management and alternative options at the lake
Sustainable Fisheries Livelihoods Programme (IPIC)	2003-2006	DFID	Participatory management at Lake Volta

Fisheries sector aid by donor

Overall, the fisheries sector has received relatively little foreign assistance relative to other agriculture sectors. Only seven donors or agencies have contributed to fisheries development projects in Ghana since 1997. The largest single project, the FSCBP, was part-funded by the World Bank (US\$9 million), while the UK Department for International Development (DFID) supported post-harvest capacity building projects and a small pilot project at Lake Volta as part of the Sustainable Fisheries Livelihoods Programme (SFLP).

The Norwegian Agency for Development Co-operation (NORAD), with the support of the FAO, provided support to two important marine stock assessment surveys, while the Japanese International Cooperation Agency (JICA) surveyed the continental shelf of Ghana.

The Canadian International Development Agency (CIDA), in partnership with DFID, designed and supported a programme of direct budgetary support to the agriculture sector (Food and Agriculture Budgetary Support), of which fisheries received US\$2.5 million.

Although there is currently no direct support to the fisheries sector, approximately 38 development partners are funding agriculture sector projects and programmes in Ghana, several of which may indirectly relate to fisheries. These donors include international finance institutions, national

development agencies, United Nations organisations, research institutes and national governments.

The macro-economic context of the fisheries sector

Ghana's fisheries sector presently contributes significantly to national socio-economic development objectives relating to food security, employment, poverty reduction, GDP contributions and foreign exchange earnings. The fisheries sector accounts for 4.5% of the national GDP (Ministry of Fisheries, 2008). The Government of Ghana has highlighted the limited growth of the fisheries sub-sector in the Long-term National Development Plan (2008-2015) and expects fisheries to increase its contribution to GDP with further subsidy and capital investment. This is despite dwindling profitability, over-exploitation and the fact that the fisheries sector is, in all likelihood, a net drain on national wealth after the costs of subsidies, management and external fisheries aid are taken into account (World Bank, 2009).

Ghana's second Poverty Reduction Strategy (GPRS II, 2006-2009) better acknowledges the role of the fisheries sector. In addition to a general commitment to aquaculture infrastructure and the restoration of the degraded environment, there are specific commitments to the support of marine fisheries through new fish storage facilities, community level structures and the establishment of small-scale fish processing industries.

The Ghana Joint Assistance Strategy (G-JAS) signed in March 2007 intends to align World Bank development assistance with the government's political and partnership cycle. It builds on commitments by development partners to work towards the goals and priorities of the PRS. The current EU Country Strategy Paper runs from 2008 to 2013, and identifies the need to revise national fisheries policies in line with scientific data and changes in resources management.

The strategy calls for effective enforcement of regulations, the establishment of integrated coastal management and improved regulation of the industry.

Fisheries performance in Ghana

Table 2 provides a summary of the performance of Ghana's fisheries.

Table 2: Summary of fisheries performance

Feature	Ghana
Fisheries production	<p>Marine: 343,961 tonnes Inland: 82,000 tonnes Aquaculture: 3,200 tonnes Total: 42,9162 tonnes Mean price/kg 5.725 Value in 2005: US\$120 million Value in 2007: US\$186 million Output: Not stable Output: 1.3% per year</p>
Major producers	Fisheries 4.5% GDP, employment 10% of population (Ministry of Fisheries, 2008)
Fishing fleets	<p>64 industrial trawlers, 240 inshore boats, 36 tuna boats and 2 motorised shrimpers. There are 11,213 canoes (56% of which are motorised). (Amador <i>et al.</i> 2006)</p>
Livelihood and employment	<p>Fishers: 2,071 million (marine and inland) Capture fisheries: 2 million Aquaculture: 71,000 Total: 2,071,000</p> <p>Secondary employment Marine: 2 million Lake Volta: 91,000</p>
State of fisheries resources	<p>Over-exploited stocks: Demersals 21.54% Exploited stocks: Small pelagics 66.46% Moderately exploited stocks: Large pelagic-tunas 12.00% (Fridjof-Nansen Stock Assessment Programme)</p> <p>Inland production is declining – most of the commercial fish species (<i>Tilapia</i>, <i>Chrysichthys</i> and <i>Synodontis spp</i>) are overexploited. (Ministry of Fisheries, 2008)</p>
Fish utilisation and trade	<p>Requirement: 880,000 tonnes Production: 420,000 tonnes Deficit: 460,000 tonnes Imports in 2007: 212,945 tonnes (Ministry of Fisheries, 2008)</p>
Supply and consumption	<p>Per capita fish consumption: 23 kg (Ministry of Fisheries, 2008)</p>
Policy and management	<p>Key issues:</p> <ul style="list-style-type: none"> • Management of fisheries and conservation of aquatic resources; • Promotion of value addition and the improvement of the livelihoods; • Sustained development of aquaculture; • Improvement of infrastructure and establishment of enabling environments and services. (Natural Fisheries and Aquaculture Policy, 2008).

Fisheries policies and plans

The National Fisheries and Aquaculture Policy of 2008 is guided by some broad, general principles including poverty reduction, decentralisation and stakeholder participation. It is structured around four major strategic areas: management of fisheries and the protection of the natural environment; promotion of value-added and livelihoods; support to aquaculture and the improvement of services provided by the Ministry of Fisheries and other institutions.

Key fisheries aid projects 1997-2009

The World Bank-funded FSCBP was designed to establish the long-term sustainability of fisheries resources and maximise their contribution to the economy. The project ran from 1996-2002 and consisted of four main components, namely: strengthening DoF; marine fisheries management; inland fisheries management and monitoring, control and surveillance. Local management was an important focus of the project, with 133 coastal community-based fisheries management institutions established (discussed later in this document). The FSCBP represents the largest single investment of fisheries aid in Ghana.

IDAF was funded by UNDP from 1989-1993, and the UNDP together with JICA for Phase II (1995-1998). IDAF attempted an integrated approach to ensure rational exploitation and management of the fisheries resources of Lake Volta. Activities included the development of safe fishing gears; collection, compilation and analysis of data from surveys and landings; as well as infrastructure development and social amenities and services, including a community fisheries complex.

IPIC was the first pilot project to be supported by the FAO/UK DFID Sustainable Fisheries Livelihoods Programme (SFLP). IPIC was implemented in three Volta districts from 2003-2006 and was intended to improve local livelihoods through participatory management.

The Icing Project was funded by DFID between 1997-2000 to develop local capacity to adapt and implement cost-effective processing and storage measures in the fisheries chain. The project aimed to help to address the problem of losses of fish and fish quality in Ghana's fisheries.

Strengthening the Organizational Capacity of Fish Farmer Groups in Ghana (2002-2003) was developed by the FAO to assist the Ministry of Food & Agriculture (MOFA) in establishing functional and sustainable aquaculture producer groups as expressed in the national aquaculture development programme. The FAO also supported the Formulation of Fisheries Policy for Ghana Project (2006-2007), which went on to form the National Fisheries and Aquaculture Policy through consultation.

Project performance

The FCBP was the single largest donor-supported fisheries development project in Ghana, and appears to be the only project to have been fully evaluated after completion. The World Bank supported the DoF and Ministry of Food and

Agriculture to conduct a study in 2009 to explore the impact of co-management initiatives, most of which were attempted during the FCBP and the SFLP Pilot Project. The study found that 90 community-based fisheries management committees had been formed at Lake Volta (under the SFLP Pilot Project) and 133 committees had been formed under the FSCBP. However, only 25% of these committees were still active. The report highlights the following issues: lack in funding and access to inputs; poor participation and facilitation; illegal practice; lacking incentives; lack of support and poor participation.

End of project reports for the Poverty and Post Harvest Fish Utilization in Ghana Project (2002-2004) suggest that new knowledge of poverty and livelihoods in the post harvest fisheries sector has been generated, and that tools now existed to assist development practitioners to understand and raise awareness of poverty and the post harvest fishery. Although these outputs were made available to the pilot districts, they had not been applied. Similarly, the IDAF evaluation revealed that a new community fisheries complex went unused.

Economic theory and project design

The emphasis of most fisheries development projects in Ghana has been on supporting technical capacity though the provision of equipment and infrastructure. The monitoring and assessment of stocks has received less support, and the focus on improving vessels and human capacity is likely to have contributed to increases in fishing efforts and over-exploitation.

It can be argued that a far greater emphasis should have been placed on theoretical and economic aspects of fisheries management. Before the new Fisheries Policy Framework of 2008, Ghana's fisheries had been managed with respect to various fisheries decrees, laws and regulations operating without a guiding framework. Without reference to scientific knowledge, increased investment by foreign interests and poor domestic MCS have led to overcapitalisation and over-exploitation of the fish resources of Ghana.

Outlook

Given the level of over-exploitation and the complexity of the sector, greater attention should be paid to MCS, based on better knowledge of stock and the sub-sectors. This would include greater investment in patrol boats, surveillance and capacity building in the relevant institutions. The community-based fisheries management committees should perform a stronger monitoring and enforcement role at a local level.

In the context of aquaculture, there should be greater effort to support public-private partnerships for fish hatcheries development, and the formulation of low cost feed using local agricultural by-products. Crucially, the artisanal sub-sector should be given support to explore alternative income-generating opportunities and in accessing new markets and technologies. Table 3 presents a SWOT analysis of the fisheries sector in Ghana.

Table 3: SWOT analysis of the Ghanaian fisheries sector

Analysis of fisheries sector	Aid needs
<p>Strengths</p> <ul style="list-style-type: none"> • Provides diverse opportunities and a major contributor to food security in all parts of the country • Significant contributor to foreign exchange and GDP • The diversity of species and harvesting methods provides options • A diversity of processing methods to meet market needs and manage supply fluctuation • Efficient post-harvest, marketing and distribution system • High demand for fish locally, regionally and internationally • Dried pelagics provide year-round food for poor consumers • Good institutional support for research and development 	
<p>Weaknesses</p> <ul style="list-style-type: none"> • Employment is seasonal, low paid, unsafe • Supply unpredictable and not increasing • Limited representation of post-harvest sector in decision-making • Processing, storage and handling practices result in loss of value • Increasing price of fish for poor • Institutional capacity to address poverty in the post-harvest sector is low • Inefficient MCS and enforcement capacity, illegal practices • Inactive community-based management committees • Inadequate human resources, high illiteracy and limited skills 	<ul style="list-style-type: none"> • Support for employment during off-peak fish season • Support to improve conditions in the sector • Improvement in safety standards for fishing and fish handling • Support for dynamic fisheries management based on efficient MCS
<p>Opportunities</p> <ul style="list-style-type: none"> • Better post-harvest sector links to poverty reduction strategy • Stabilised fish supplies could maintain current employment, income and food security • Fish supplies could be increased through improved resource management • Considerable experience in sustainable fuel-wood production • Considerable experience in improving fish processing • Emerging local, regional and global knowledge and knowledge of alternative income opportunities • Expanding local, regional and global markets • Potential to capture greater benefits from exports • Good history of representative bodies 	<ul style="list-style-type: none"> • Improvement in fisheries habitat protection • Support for a national research fund to inform management decisions • Improvement of co-management in the fisheries sector and local government capacity
<p>Threats</p> <ul style="list-style-type: none"> • Future decline in supplies as a result of over-exploitation • Increasing migration in the sector, further reducing income • Lack of viable alternatives • Food security of the poor decreasing as fish prices rise • Foreign exchange loss if fish quality and quantity falls • Fish smoking costs increase with declining fuel-wood • Changing demand may affect livelihoods of processors • Increased imports and aquaculture supply depresses local prices 	<ul style="list-style-type: none"> • Research to understand global climate change and link to stock fluctuations

There are several future development projects which will relate to the fisheries sector. The West African Regional Fisheries Programme (WARFP) aims to increase wealth generation from marine fisheries in the region. The World Bank has assisted in the development of a five-year strategy (2009–2014) to increase investment and support to the capture and aquaculture sub-sectors.

The Integrated Coastal and Fisheries Governance (ICFG) programme for the western region of Ghana is a planned collaboration between the US government and local partners in Ghana for the coastal zone of the region, which is soon to become a major focus for oil and gas production. The programme aims to address two priority coastal governance issues: the long-term decline in fish stocks and the increasing conflict in fisheries. The emphasis will be on the artisanal fisheries sector and its interaction with the semi-industrial and industrial fleets.

The Ghanaian fisheries sector is confronted with many challenges. The present National Fisheries and Aquaculture Policy is yet to be formally launched, but there is already some demand for it to be re-designed. Major donor partners, including the World Bank, have made it quite clear that they would prefer a much more pragmatic and definite fisheries policy. There is a commonly-held view that the Ministry of Finance (MOFI) has over-emphasised aquaculture development to the detriment of the marine and inland sub-sectors. International development partners want to see far greater emphasis placed on science-based fisheries protection and decision-making.

Summary

Only seven donors have provided support to fisheries development projects in Ghana, and there are currently no major projects operating. Project evaluation reveals that performance has been varied, especially with respect to the establishment of new community-based fisheries management institutions. Ghana has received direct support in the development of a new fisheries policy, but there are now doubts over its relevance and it is not yet in use.

The fishery sector is now well-acknowledged as an important source of national and local revenue, especially to vulnerable fishing communities where it is expected to be an important driver in poverty alleviation. The Ghana PRSP and the Country Assistance Strategy both highlight the role and potential contribution of fisheries to development.

Key findings

1. Since 1997, seven major fisheries projects have operated in Ghana, supporting integrated coastal management, co-management, policy formulation, stock assessment, aquaculture and post-harvest activities.
2. The majority of these projects focussed on the marine sub-sector. Two specifically targeted the inland fisheries of Lake Volta and Lake Bosumtwi.
3. The World Bank has been by far the largest single donor with respect to the number of projects and extent of financial support, providing the US\$9 million FSCBP.

4. The projects are not extensively evaluated, but there are disappointing results with respect to the establishment of new forms of co-management via new community-based fisheries management committees on the coast and at Lake Volta. These institutions do not appear to be financially viable, or to have the incentive to conduct basic management functions such as reporting.
5. New knowledge developed for the management of capture and aquatic fisheries has not been taken up.
6. Recent national development strategies (the PRSP and the Country Assistance Paper) make full reference to national fisheries with respect to poverty and wealth generation, which contrast with previous documents.
7. However, the National Fisheries and Aquaculture Policy developed with the support of FAO is yet to be applied.

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APPENDIX 2: FISHERIES AID IN SENEGAL⁸

Abstract

Fisheries development aid since 1972 has primarily focussed on capacity and production within the sector and most commercial stocks in Senegal are over-exploited or in decline. Senegal's most recent PRSP better defines the economic and development function of the sector and the national fisheries policy and strategy have been designed in response. In terms of volume of aid, Senegal's main fisheries development partners are the EU, World Bank and JICA, all of which tend to focus support on infrastructure and the capacity of the value chain. Four other bilateral donors have supported a range of smaller projects, but there has not been great emphasis on fisheries management capacity based on economic knowledge and control of effort. Where projects have attempted to support the development of integrated management plans for stock or regions, recent evaluation suggests that progress is modest and subject to delays.

⁸This paper is a summary of: Boubacar, B.A. 2010. African Fisheries Development Aid, Country Case Study No. 2 – Senegal. (In World Bank. 2010. Political Economy of Fisheries Reform: Lessons and Applications for Development Assistance. World Bank Project No. 7150204. Output No. 4.

Introduction

Senegal has received considerable international aid for the development and management of its fisheries since 1972. For most of this period, no coherent policy framework existed to co-ordinate or direct these projects and programmes. The result was overcapacity in both capture and processing, and

stocks fell into decline. Despite increasing fishing effort, there has been a 32% fall in average production in the last fifteen years. Currently, fisheries aid is still applied to develop infrastructure, build capacity in the industry and the management of institutions and, more recently, to attempt to develop integrated management approaches and plans for marine areas.

Table 1: Major recent fisheries projects

Name of project	Years	Donor	Main themes
Pirogue Registration Programme (NRP)	2002-2009	Spanish Agency, Swiss Agency, World Bank, EU	Physical and electronic cataloguing of the pirogue fleet
Integrated Marine and Coastal Resources Management Project (GIRMaC)	2005-2010	World Bank	Habitat and species conservation, management and M&E
Sustainable and Joint Fisheries Management Project (PGDPP)	2008-	French Development Agency	Deep water shrimp and hake management plans
Strategy for Fisheries Management in Senegal (SAGPS/COM/STABEX/FISHERIES)	2008-2011	EU	Design and implementation of octopus management plans, dock rehabilitation, local capacity in handling
Infrastructure for Artisanal Fisheries	2004-2006	Spanish Agency	Port handling and storage capacity

Fisheries sector aid by donor

Senegal enjoys the support of many development partners, either through multilateral co-operation with specialised institutions in the United Nations system and the European Union, or through bilateral co-operation with France, Japan, USAID, Spain, Switzerland, ADB and the World Bank. Some assistance is provided within a structural framework based on global strategic support programmes covering a number of years. Programmes by the EU, World Bank and the Japanese Co-operation, which are Senegal's main partners with regards to fisheries development are included in this framework.

The volume of the fisheries sector as part of the global volume of public investments was 50,143 billion CFAF over the period 2000-2006. The Official Development Assistance (ODA) allocated to the sector was 1.5% of the total ODA over the same period. This fisheries share is relatively small, given the objectives ascribed to this sub-sector regarding wealth creation in the national and sectoral strategies and policies for growth and poverty reduction (see below).

The relatively weak financial resources provided by the national budget and the donor agencies to support more

efficient measures are insufficient for the sectoral authorities to establish good fisheries governance. This is one of the main factors behind the current crisis in marine fishing.

Japan focuses its activities on fishing infrastructure, building fishing complexes (Kayar and Lompoul, Kaolack market), providing a fisheries research vessel, disseminating sea product processing techniques, developing fisheries management plans, and disseminating management and maintenance techniques. The Spanish Co-operation funds fisheries development programmes. For example, a programme for the installation of five refrigeration units has just been completed along the coast (refrigeration plan, phase II), while two further phases for the installation of refrigeration units are planned. The French Development Agency financed five processing areas on the Grande Côte (Great Coast) and the upgrading of the port of Ziguinchor.

Non-governmental organisations (NGOs) play an important role in fisheries policy through professional organisations. Development partners fund NGOs directly to support populations directly at base level.

The EU has played a role in sites where the state was absent, or simply took over unfinished projects. The FAO intervenes occasionally in fisheries funding through specific studies or consultancies.

The macro-economic context of the fisheries sector

The development model implemented in the fisheries sector inexorably led to resource rent dissipation for many years. An economic approach to managing fisheries was adopted by the government in 2007 (see the Accelerated Growth Strategy (AGS) below), and was reasserted by the prime minister during his July 2009 General Policy Statement. Fishing continues to be an engine for growth in Senegal, and new reform guidelines are being introduced into the sector by the government, with the support of the thematic group of fisheries donor agencies.

Fishing had a key role in the Economic and Financial Recovery Policy (PREF) implemented by the Government in the early 1980s, and the status of fisheries in Senegal is essentially the product of past expansionist economic policies based on significant technical and financial support, both bilateral and multilateral. During the period covered by the PREF (1980-1984) the fisheries sector grew at an average of 3.8% per annum. Fishing GDP grew by 17% per annum, compared to that of 12% growth in the primary sector.

Fish resources are now either fully exploited, overexploited or in decline. Despite this, the government of Senegal and its international development partners have continued their policy of sectoral support. While some projects have been implemented in order to increase supply, other projects and programmes have been implemented in order to correct the management system and to enable sustainable and rational resource exploitation.

The government was supported by donor agencies to develop fisheries production from 1972 to 1995 when the sector was the primary growth driver in Senegal. This growth occurred in the absence of a coherent framework of sectoral interventions shared by stakeholders aware of the limited nature of fish resources. The main stocks in Senegal experienced a very serious fall in the abundance of the most valuable fish resources. In 2000, high-value demersal catches fell by 40% compared to their 1999 level. Industrial catches have fallen by 50% since 1997, while the

value-add of the industrial fleet decreased from 36% to 22% of the total fish value landed between 1999 and 2000. The value-add of the current range of fish-based products is well below its potential maximum and several processing plants are operating far below their optimal capacity. The period 1995-2000 was marked by a decline in the productivity of artisanal boats and industrial units, despite expanding catch and processing capacities.

In Senegal, the Poverty Reduction Strategy (PRSP II) is the reference framework for national public policies. Sectoral objectives and strategies are part of the poverty reduction effort. In the PRSP II the fisheries sector is considered to be one of the levers in theme 1 of the strategy concerning “wealth creation”, which must play a central role in poverty reduction efforts. This role is justified by the sector’s potential for wealth creation and the importance of fisheries contribution to the national economy (jobs, national consumption, exports and GDP).

In contributing to achieving the targets of this theme, the sector is expected to increase landings as a result of better marine resource management and the development of aquaculture so that from 2008 “the pace of growth in the sector would reach 10.6% on average over the 2006-2010 period compared with an average of 1.9% from 2004-2006”.

The AGS of 2005 aims for a quantitative improvement in the structure of growth in order to make it more effective in the fight against poverty and to diversify sources of growth in order to secure and sustain it. To that effect, five high potential clusters, likely to provide key activities and lead each cluster, were identified – fishing and aquaculture comprise one of these clusters. The fisheries and aquaculture component of the AGS is based on three main ideas:

1. Fisheries are not in need of investment, but require disinvestment in order to restore fisheries rent;
2. Fisheries management, not increasing production, is priority;
3. The sector should be managed to maximise benefits across the sectors and society.

Fisheries performance in Senegal

Table 2 provides a summary of the performance of the fisheries sector in Senegal.

Table 2: Summary of fisheries performance

Feature	Senegal
Fisheries production	Estimated total marine catch: 427,500 tonnes Artisanal fisheries: 385,700 tonnes Industrial: 41,800 tonnes
Fishing fleets	Industrial vessels: approximately 95 Artisanal boats: 9,200 (66% exclusively marine) (Source: DPM, CPI document, 2008)
Livelihood and employment	Total fishers: 59,428
State of exploitation of fish resources	Most species fully exploited, over-exploited or in decline 32% fall in total catch over the last 15 years
Fish utilisation and trade	Export: 89,659 tonnes Export value (CFAF): 179.37 billion 48% is exported to EU 39% is exported to African countries 12.6% GDP
Supply and consumption	Per capita fish consumption is about 41 kg
Policy and management	Key issues: <ul style="list-style-type: none"> • Dependence on imports • Weak analytical and management capacity • Losses in supply chain • Overcapacity in capture and processing facility

Source: MEM and DPEE (MFP, 2006)

Fisheries policies and plans

In 1998 the Fishery Master Plan was adopted alongside a new Fishing Code (Law No 98 – 32). This Code was innovative in that it created joint government/industry management organisations through fisheries councils, and identified fisheries management plans as the tool for the sustainable management of Senegalese fisheries.

A national dialogue on fishing and aquaculture was organised in November 2000 under the presidency of the head of state. This dialogue led to the adoption of a Strategy for Sustainable Development of Fishing and Aquaculture, i.e. a new framework for role-players' interventions. But this did not stem the crisis in the sector. An evaluation of progress in the implementation of this strategy for developing the fisheries sector was undertaken in January 2004 by all role-players involved in fishing and aquaculture

(administration, professional organisations, NGOs) and the donor agencies of the sector. This evaluation put a stop to the dispersion of interventions (state, donors and NGOs), and put into place a framework for the co-ordination of sectoral interventions. A thematic group of fishing donors was created, including all the fishing sector technical and financial partners.

The required sectoral reforms are set out in the macro-economic and sectoral policy documents adopted by the government, in particular the new Fishing Sector Policy Document. They seek first to clarify the system of access to fish resources (including artisanal fishery) within the legal and regulatory framework for fisheries.

In order for the fisheries sector to contribute to Theme 1 of the PRSP II, a new sectoral policy was established in 2007. The Fisheries and Aquaculture Sectoral Policy was

developed to accelerate ongoing reforms and increase their effectiveness through improved coherence with public interventions, projects and programmes. Hence, this new sectoral strategy and policy is perfectly coherent with the poverty reduction and growth acceleration strategy mentioned above, and constitutes the basis on which to develop operational projects and programmes in the fisheries and aquaculture sector.

Key fisheries aid projects

The aid projects can be categorised as follows: infrastructure; institutional support; projects supporting the industry (capacity building); and marine environment projects (protected areas, etc.).

The Pirogue Registration Programme (NRP) (2002-2009) for the computerised registration of the artisanal fleet was developed to control their number and the access to resources in the artisanal sector. It has been implemented with the support of the Swiss Co-operation, the Spanish Co-operation, the World Bank and the EU. The national two-year implementation phase of the project started in October 2006.

The main outcomes expected from this programme are the acceptance of and the commitment to the NRP by the role-players, the replacement of the current registration card with a chip card, the physical and electronic marking of all artisanal-type boats and the creation of a unique database of the pirogue fleet.

The marine fisheries sector received the support of three projects for the development and implementation of the management plans of certain fisheries. These were the Integrated Marine and Coastal Resources Management Project (GIRMaC) funded by the World Bank, the Sustainable and Joint Fisheries Management Project (PGDPP) funded by the French Development Agency and the COM/Stabex Programme funded by the EU.

The objective of the GIRMaC Programme (2005-2010) is to support local communities in the management of marine and coastal resources and in the responsible exploitation of resources combined with the protection of ecosystems. It is divided into two components: "sustainable management of fisheries" and "habitat and species preservation".

The World Bank and GEF gave US\$7.3 million in funding for the fisheries section of the programme. The key activities of the programme are to: design and implement fisheries management plans; promote the co-ordination of co-management initiatives and fisher centres; support MCS of local initiatives and promote participatory research.

With regards to the strategic theme of "sustainable management and recovery of fish resources", the programme should contribute to the promotion of local fish resource co-management initiatives in order to protect the population of threatened species, and to develop and implement fisheries management plans for key species.

The programme for Infrastructure for Artisanal Fisheries (2004-2006) aimed to improve sea product storage and preservation conditions, by increasing the capacity to produce quality ice for the food industry to limit post-harvest losses and provide non-coastal zones with fish in good condition. The programme was funded by Spain.

The programme was to comprise two phases: the provision of five refrigeration plants (completed) and the provision of transportation equipment (currently under negotiation). Overall, the outcomes of the projects and programmes designed to meet the national demand for fisheries products are well below expectations in that the production volumes expected to meet the deficit in national supply were not reached. At the same time, the refrigeration units, built along the coast, are not yet operational (see table below).

The SAGPS/COM/Stabex/Fisheries Programme funded by the EU includes an important component relating to health standards at the landing sites. This programme is funded from the Stabex funds in accordance with the 8th European Development Fund to a total of 3.936 billion CFAF. This three-year programme should contribute to improving the conservation of fish resources and the basic production infrastructure.

The SAGPS/COM/Stabex/Fisheries Project was expected to design, adopt and implement fisheries management plans for octopus and other species, and to strengthen the capacities of government and local fisheries role-players in surveillance and co-management. The project was also intended to rehabilitate dock infrastructure and artisanal processing sites.

Project performance

Some of the ongoing fisheries aid projects are still in the process of releasing funds for early implementation stages and such delays consequently delay the impact of projects. In the case of the NRP, only 1,420 pirogues had been registered by 2008, representing 10.9% of the entire fleet (NRP document). The complete physical and computerised registration of the pirogues, the *raison d'être* of the NRP, was not achieved by the end of the programme and the project was granted an extension to 2009 to complete 100% registration of the pirogue fleet.

In other cases, although projects have been delayed (especially with respect to the development and implementation of management plans), they have achieved many of the activities required. With respect to GIRMaC, for instance, it was found that the programme has successfully delivered with respect to the validation of the sectoral policy document and the reappraisal of the fishing code. It has also established Local Artisanal Fisheries Councils (LAFCs) and identified co-management pilot sites where local artisanal fisheries co-management initiatives have been selected by communities. Significant progress was also recorded in terms of awareness-raising activities for the role-players in local co-management initiatives. "Fisher centres" are also being built.

However, three years into the programme, GIRMaC has not delivered the key fisheries management plans for white shrimp and *cymbium*. It should be noted that this delay in implementing this key activity was due to lengthy procurement processes, which had to be reviewed by the World Bank and passed through new national procedures concerning public tenders. In summary, it can be concluded that, as of 3 December 2008, GIRMaC had, for the fishing component, carried out the priority measures and actions of the sector that fell under its responsibility according to the indicators mentioned in theme 1 of PRSP II with reasonable satisfaction.

A series of four evaluations carried out in 2009 found that the SAGPS/COM/Stabex/Fisheries programme had achieved significant progress in relation to:

1. The rehabilitation of fishing workshops and docks;
2. Strengthening actor capacities in artisanal processing;
3. Strengthening capacity with respect to food safety.

Despite the effort to adapt policy, the situation in the sector has not improved greatly because of the limited capacity of the government to take the necessary steps to deal with the crisis. Therefore governance inefficacy is a major cause of the current fishing crisis in Senegal, and is largely responsible for the decline in demersal fish stocks and the growing shortage of fish resources available for processing and export.

Without any doubt, there is a strong external will to support fisheries development activities, as shown by the design and the implementation of large-scale projects and programmes, together with greater resources. Yet, despite the efforts made and the resources mobilised, these projects and programmes lead to very few changes. The responsibility for this situation is shared: the state does not recognise its poor investment choices, nor do the development partners.

Economic theory and project design

Fisheries development aid projects and programmes are first conceived by donor agencies. The field of action is already defined, without consulting with the role-players in the sector. For instance, the EU does not finance research or the MCS amongst other things, despite their significance in the current fisheries policy. Japan is only interested in fisheries infrastructure. Generally speaking, “soft” projects are of little interest to the donor agencies. Sectoral authorities are only the second in line to be informed that a technical and financial partner is willing to fund its segment of the sector.

Poorly-formulated projects and programmes are responsible for persistent problems and needs in fisheries development. Sectoral issues are rarely taken into account in the formulation phase and therefore the results that are achieved by programmes and projects do not correspond with the real development needs of the sector.

Other than the NRP, which attempted the registration of the fleet, most of the projects address infrastructure concerns rather than fisheries management based on knowledge and economic principles.

Outlook

Senegal has a well-established tradition and experience in fisheries and in fish processing based on a certain number of assets and strengths. These assets were responsible in the past for the competitiveness of Senegalese industry in general and the fisheries sector in particular.

Table 3 presents a SWOT analysis of the fisheries of Senegal, highlighting the constraints posed by overcapacity and uncertain international markets.

Table 3: SWOT analysis of the Ghanaian fisheries sector

Analysis of fisheries sector	Aid needs
Strengths <ul style="list-style-type: none"> • A long and wide continental shelf relative to land area • High fish biodiversity • Established inland and coastal fisheries and processing skills • Established artisanal and industrial fleets • Good infrastructure and port facilities 	
Weaknesses <ul style="list-style-type: none"> • Over-exploitation and degradation of the marine environment • Processing and harvesting over-capacity • Significant post-harvest losses • Lacking inputs for onshore activities and limited freight capacity • High cost of product to poor • High dependence on imports • Weak analytical, monitoring and co-ordination capacities • Lack of co-ordination between public institutions • Limited human resources and skills in related areas (social sciences, etc.) • Poor performance of professional organisations (not representative or adaptive) 	<ul style="list-style-type: none"> • Support to effect control measures, including MCS
Opportunities <ul style="list-style-type: none"> • Utilisation of discarded by-catch • Export and other market development of artisanal catch • Development of new processing and value chain • Loss reduction through awareness raising 	<ul style="list-style-type: none"> • Assistance to private-public partnerships and enterprise
Threats <ul style="list-style-type: none"> • Collapse of some stocks by over-exploitation and poor practice • Non-conformity to European directives on food safety and lack of traceability • Harm to domestic market and poor households if small pelagic exports are increased • Potential bankruptcy of processing and handling enterprises in debt to the Port of Dakar • Access restriction and the progressive reduction in national fleet activity in the EEZs of the sub-region 	<ul style="list-style-type: none"> • Support to improved marketing and alternative products

The sector has growth opportunities which rely primarily on improving the fisheries management system in order to generate rent. The business environment could also be improved and a dynamic partnership between the public and the private sectors should be developed. Over and above these opportunities for growth in the medium-term, there are niches for growth in the short-term in relation to the utilisation of alternative species and by-catch.

Summary

Many factors contribute to the continuing crisis in the sector.

Factors include:

1. The low level of financial resources made available in the national budget and by donor agencies in order to support more efficient measures;
2. The reluctance to offend well-established industrial interests;
3. The pressure exerted by fishing enterprises to maintain the status quo;
4. The spectre of social and political consequences from any measure aiming to limit or curb fishery expansion, in particular the artisanal fishery.

Development aid has been provided to Senegal to develop infrastructure; build capacity in industry and management institutions; and develop integrated management approaches and plans for marine areas. Recently-evaluated projects suggest that progress on broader management plan approaches is less often achieved and is subject to delays.

Key findings

1. Most commercial species are fully exploited, over exploited or in decline.
2. The domestic market still depends on significant imports from neighbouring countries.
3. Fisheries policy and strategy follow the PRSP and AGS closely.
4. Major bilateral partners include France, Spain, Japan, Switzerland and the US.
5. The government of Senegal and the various international partners are generally impelled to pursue hard projects with technical functions, rather than broader, integrated management programmes.
6. Few projects included any component to manage effort on the basis of economic principles and knowledge of the fisheries.
7. Financial constraints delayed project activities in both technical and fisheries management projects.
8. Post-harvest stakeholders are vulnerable, but there may be options to explore alternative stocks and the better use of by-catch.

References

BOUBACAR, B.A. 2010. African Fisheries Development Aid, Country Case Study No. 2 – Senegal. (In World Bank. 2010. Political Economy of Fisheries Reform: Lessons and Applications for Development Assistance. World Bank Project No. 7150204. Output No. 4.)

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APPENDIX 3: FISHERIES AID IN MOZAMBIQUE⁹

Abstract

Fishing provides a vital socio-economic role for artisanal fishing communities which land about 91% of the total marine catch in Mozambique. Despite the productivity of the fisheries, most commercial species are already overexploited or fully exploited. Mozambique's legislative and policy framework for fisheries management has been developed in partnership with international donors, and fits well with national macro-economic policy, poverty reduction targets and the ongoing process of decentralisation. At least 20 of the 65 fisheries development projects since 2000 have focussed on the artisanal sub-sector, and evaluations reveal there have been considerable achievements with respect to infrastructure and institutional development. However, early experiments with bio-economic modelling were not extended beyond the 1990s, and there are serious failings with respect to effort control through limited MCS and regional co-operation.

Introduction

In the period 2000-2008, 65 projects were active with a total value of around US\$143 million (US\$129 million contributed by international donors). The projects operated in the fields of artisanal fisheries (55%), small-scale aquaculture (1%), port infrastructure (19%) and institutional development (21%). **Table 1** provides a summary of the major projects with budgets exceeding US\$2 million.

⁹ This paper is a summary of: Tenreiro, J. & Menzes, A. 2010. African Fisheries Development Aid, Country Case Study No. 3 – Mozambique. (In World Bank. 2010. Political Economy of Fisheries Reform: Lessons and Applications for Development Assistance. World Bank Project No. 7150204. Output No. 5.)

Table 1: Fisheries projects 2000-2008 (projects in excess of US\$2 million)

Name of project	Years	Donor	Main themes
Nampula Artisanal Fishing Project (PPAN)	1995-2002	IFAD, OPEC	Community development, fisheries development, markets and access, financial services and institutional support
Fisheries information systems	1999-2005	DFID, SADC	Regional exchange of statistics
Rehabilitation of artisanal fishing capacity in Sofala, Inhambane, Gaza, Nampula and Tete provinces (post-emergency intervention)	2000-2002	Italian Co-operation, FAO	Assistance with the recovery of fishing capacity
Sofala Bank Artisanal Fishing Project (PPABAS)	2002-2011	IFAD, NORAD, BSF, CNCS	Community development, fisheries development, markets and access, financial services and institutional support
Northern Nampula and Cabo Delgado Artisanal Fishing Project (PPNCD)	2003-2009	AfDB	Provision of credit, development of community infrastructure and institutional support
Inhambane and Gaza Coastal Fishing Development Project (PPAGI)	2008-2010	Italian Co-operation	Development of fishing, fish processing and marketing, social development, financial services, participatory management and institutional support
Rehabilitation of Maputo Fishing Port (Phases I and II)	1999-2011	JICA	Rehabilitation of small quays and cold stores, repair of processing facilities, construction of support infrastructures
Rehabilitation of the Beira Fishing Port	2004-2009	BADEA, BID	Rehabilitation of quay, construction of support infrastructures
Support to the fish inspection system in Mozambique	2007-2012	DFID	Institutional support, implementation and management of Mozambican quality standards
Surveillance of fishing activities (SADC MCS programme)	2001-2006	EC	Training of inspectors, air and naval patrol
Institutional support to the fisheries administration	2000-2004	NORAD	Monitoring and evaluation of high commercial value fish stocks; assistance to fisheries administration; institutional support
Support to private investment in semi-industrial fishing, processing industry and deepwater crustacean fishing	1996-2009	DANIDA, ICEIDA	Revolving fund established
Continued support to the fisheries sector	2006-2008	NORAD	Stock assessment, administration, aquaculture, business development

Source: Department of International Cooperation, Ministry of Fisheries

Between 2000 and 2007, fisheries development projects were funded by donors in the form of loans (41%) and grants (49%) and 9% of overall funding was provided by the Government of Mozambique. A total of US\$142.5 million was directed to fisheries projects and the majority of this support (55%) was directed to work in the artisanal sector (Ministry of Fisheries, Department of International Cooperation (DCI)).

Fisheries sector aid by donor

The most important fisheries development partners of Mozambique in the period 2000-2008 were IFAD (39% of loans value and 18% of the total aid value), NORAD (26% of grants value and 14% of the total aid value) and ADB (31% of loans value and 16% of total aid value). Together with BADEA, ICEIDA, BID, Italy, JICA, DFID and DANIDA, these donors represented 85% of all fisheries development aid to the country.

Loans were primarily directed to the development of artisanal fisheries (IFAD and ADB, 69% of total), and the remaining value to the rehabilitation of port infrastructure (BADEA and BID, 31%). Grants were also focussed on the artisanal sub-sector (with Italy, NORAD, BSF, DFID, ADB, OPEC, Marketing, Information and Technical Advisory Services for the Fisheries Industry in Southern Africa (INFOSA) and the Overseas Fisheries Cooperation Foundation (OFCF), representing 38% of the total value).

NORAD's involvement in the fisheries sector in Mozambique has evolved to include institutional support to small-scale fisheries research to assess the capacity of resources, and to convert this to management measures through the sector's policies, strategies and development plans. Since the adoption of the programme of Norwegian aid to the Fisheries sector in 2005, this co-operation has expanded to include strengthened support to surveillance with considerable inputs of funding.

The IFAD approach is pragmatic. In the Sofala Bank Artisanal Fisheries Project (PPABAS) project, for instance, an integrated approach is taken and market failures receive priority, together with the mobilisation of the community to improve their social conditions. Under this framework, different donors provide resources towards what they consider to be their priorities – BSF funds a community development component, and IFAD and NORAD fund fishing and marketing development (including access roads to fishing centres), etc.

ICEIDA's work is more focussed, concentrating on a narrow range of activities within several smaller projects. These projects include fish inspection and training/extension activities in artisanal fisheries and small-scale aquaculture.

The macro-economic context of the fisheries sector

It is estimated that fisheries currently contributes at least 3% to Mozambique's GDP. In terms of poverty reduction and food security, artisanal and semi-industrial fisheries play an important role, as most of the catch is directed to domestic consumption; and in some regions people rely almost entirely on those sources for their subsistence.

Fisheries governance varies according to the type of sub-sector, from open access at local level to quota/effort allocation regimes for industrial fisheries. The implementation of co-management systems at local and national levels is still incomplete and is not consolidated.

The fisheries development policy in force finds its reference points in the series of policy instruments and national strategies which express much of the national effort to develop the country, among which the Government Five Year Programme for 2005-2009, the Action Plan for the Reduction of Absolute Poverty (PARPA II) for 2006-2009 and the Plan of Action for Food Production (PAPA 2008-2011) stand out. PARPA I and II were adopted as national development plans.

Within the fisheries sector, the following instruments for its economic and social development stand out under analysis: the Fisheries Master Plan 1995-2005, the Strategic Plan for the Artisanal Fisheries Sub-sector 2007-2011, the Strategy for Aquaculture Development in Mozambique, the Small-scale Aquaculture Development Plan 2009-2013, the Fisheries Research Development Strategy (2008-2012), the MCS Policy and Implementation Strategy, the Sofala Bank Shrimp Fisheries Management Plan and the Line Fisheries Management Plan. The Economic and Social Plan 2009 (PES) is the annual instrument for implementing the government's Five-year Programme and the PARPA II, and includes a component for the fisheries sector.

According to a content analysis methodology applied by Thorpe (2005) to evaluate how fisheries issues were included into the PRSPs, national programmes and other donor strategic programmes, Mozambique ranked medium-low for PRSP I and medium-high for PRSP II.

A follow-up study in 2006 examined coherence between umbrella policies and the Mozambican Strategic Plan for the Artisanal Fisheries Sub-sector (PESPA). The study revealed a high level of vertical coherence with umbrella policies (PARPA and Five-year Government Programme (2005-2009)), and with the 1994 Fisheries Master Plan and the Fisheries Sector Development Plan (2002-2006).

Mozambique's PARPA II, has the following objectives regarding artisanal fisheries: (i) to improve the standard of living of the fishing communities and; (ii) to guarantee sustainable exploitation of fishing and aquaculture resources. PARPA II seeks to:

1. Create and/or rehabilitate the infrastructure supporting artisanal fishing in the main fishing centres,
2. Increase supplies of fish to the domestic market;
3. Encourage the distribution and marketing of fish and fishing inputs.

These goals are aligned with all partners' goals supporting artisanal fisheries, the Millennium Development Goals and the PRSP II. A new PARPA is being prepared for the period covering the next legislature term (2010-2014).

The World Bank Country Assistance Strategy (CAS) does not feature fisheries as a priority. However, the emphasis on

the sector has increased since 1995, and the 2008 version identifies fisheries as instrumental to poverty alleviation under pillar 3 (economic development). CAS also recognises fisheries as an important contributor to GDP and export earnings.

The fisheries sector is not central to the European Union Country Strategy Paper and Indicative Programme 2008-2013. In the overview of past and present EC co-operation, only the new Fisheries Agreement for 2007-11¹⁰ is mentioned as a result of the co-operation between EU and Mozambique.

The new Fisheries Master Plan (FMP) for 2010-2019 acknowledges and attempts to address poverty to a greater degree than before. The objectives are to:

1. Improve food security for the population;
2. Improve living conditions for artisanal fishing communities;
3. Increase the contribution of industrial fishery to the national objective of poverty reduction;
4. Increase the net contribution from the sector to the country's balance of payments.

Although these objectives were previously outlined in the FMP (1995-2005), a clear strategy for meeting them has now been developed for each sub-sector.

Fisheries performance in Mozambique

The annual fisheries production in Mozambique is clearly underestimated due to a limited coverage of the artisanal fisheries statistics, particularly in inland areas. The total catch value in **Table 2** below refers to an estimate based on the present statistical coverage in marine waters (artisanal, semi-industrial and industrial fisheries) and in inland waters. Although 91% of marine fisheries production is derived from the artisanal fleet, the industrial catch consists almost exclusively of crustaceans and high value demersal fish species intended for export and represents 52% of the total value.

¹⁰ The agreement provides tuna fishing rights in the country's EEZ against an annual compensation of € 1.2 million.

Table 2: Summary of fisheries performance (2007)

Feature	Mozambique
Fisheries production	Estimated total catch: 113,195 tonnes Artisanal fisheries: 72,893 tonnes Commercial fisheries: 40,302 tonnes Inland catches are greatly underestimated Value of artisanal product: US\$164,733 Total export of commercial product: US\$80.1 million of which US\$69.4 million was shrimp
Fishing fleets	Industrial vessels: 56 Semi-industrial (ice): 72 Artisanal boats: 39,398
Livelihood and employment	Direct primary employment Total fishers: 137,971 Artisanal fisheries: 133,571 Commercial fisheries: 4,400 Other ancillary activities related to fisheries: 45,725 Subsistence: 89,765 Total direct employment: 273,461
State of exploitation of fish resources	Shallow-water shrimp: fully exploited to overexploited in the Sofala Bank and Maputo Bay <i>Sergestidae</i> shrimp: moderately to fully exploited Spiny lobster: depleted/recovering since 1998 Deep-water shrimp: underexploited

Table 2: Summary of fisheries performance (2007) (continued)

Feature	Mozambique
State of exploitation of fish resources	Crab and lobster species: moderately exploited Coastal demersal fish: fully to overexploited Large and small pelagics: underexploited Freshwater species at Kapenta (Cahora Bassa Reservoir): fully exploited
Fish utilisation and trade	Approximately 98% of industrial and 49% of semi-industrial catches were exported in 2007 Export: 14,707 tonnes Domestic market: 98,488 tonnes Value (US\$ million): 240.8 Only 2% of the artisanal catch was exported and 50% of the Kapenta commercial inland fishery catch
Supply and consumption	Per capita fish consumption is about 6 kg (FISHstats, 2006).
Policy and management	Key issues: <ul style="list-style-type: none"> • Policy and fisheries management results are poor • Limited role of research, stock assessment and bioeconomic assessment • Management plans prepared but still not adopted; • Insufficient surveillance not covering all EEZ • A co-management system for artisanal fisheries is being implemented at district, province and national level • High dependence on ODA

Source: Menezes. 2008. *Mozambique: Fishery Country Review – Big Numbers*. Prepared for FAO Fisheries Master Plan (2010-2019), under preparation by Intellica, August 2009.

Fisheries aid projects and performance 2000-2008

The total number of projects that were active during 2000-2008 was 65. Of these projects, 20 had the development of artisanal fisheries as their main objective, seven the development of small-scale aquaculture, four the rehabilitation of fishing port infrastructure, ten the strengthening of fish inspection services and improvement of quality control and 24 capacity building of the fisheries administration.

During 2000-2009, development interventions found their broad justification in the FMP 1995-2005, the government programmes of the last two legislatures, the PARPA I (2002-2005) and II (2006-2009) and the Fisheries Sector Development Plan (2002-2006). Development projects were justified in those national instruments. The objectives of the Fisheries Master Plan (1995) were kept as the main reference for the sector beyond its expected duration of ten years. All the projects aimed at artisanal fisheries development are coherent with objective 3 of the 1995 FMP (to raise the standard of living in fishing communities).

The integrated approach to artisanal fisheries adopted within projects such as the IFAD-supported Nampula artisanal fishing project (PPAN) and Sofala Bank Artisanal Fishing Project (PPABAS) were instrumental in the development of the PESPA 2007-2011.

A mid-term review of the programme of Continued Support by Norway to the Development of the Fisheries Sector in Mozambique MOZ 2462 Fishery Sector Support (MOZ – 00/300 Fishery Sector Programme) was undertaken in 2008. Levels of implementation were found to be highly variable, with the MCS activities generally scoring best. The evaluation found that planning and policy activities, especially, were seriously delayed such as the preparation of the FMP.

In a non-prioritised order, the following four overarching ideas behind the new programme were suggested by the evaluation team:

1. A need to orient the programme more towards the development and management of small-scale artisanal

fishers, thereby continuing the Norwegian assistance in this area for another period;

2. If this orientation is to be achieved, the management structures at provincial and district levels will have to be strengthened and improved;
3. There should be indications of an exit strategy within certain areas;
4. A new programme and project structure, better aligned to the roles of the institutions, should be introduced.

In 2006, the Fund for the Promotion of Fishing (FFP) sponsored a study of international co-operation in Mozambique from its independence in 1975 to 2000. The study attempted to assess the impact and deduce the lessons learnt from this period.

The artisanal fishing sector received the bulk of the assistance provided by the international community. With respect to capacity building, the report states that:

1. International donors provided technical assistance and the influence of foreign support on national staff was considerable;
2. Donors contributed greatly to census and statistics, the elaboration of the Fisheries Law and its regulations (NORAD, FAO), the preparation of the first FMP (DANIDA, NORAD) in 1994 and the strengthening of co-ordination and monitoring capacity (EC);
3. Donors supported numerous projects targeting improvements to the artisanal sub-sector and living conditions (Nordic countries, FAO). Fisheries research benefited from important contributions from international partners (especially NORAD) that provided better knowledge of fishing resources and potential.

The ports at Beira, Maputo and Quelimane have all been equipped with cold storage and processing facilities (the Netherlands), and facilities were improved at Angoche and Quelimane for industrial and semi-industrial fleets (UK, Japan).

Despite these achievements, it is clear that many activities were not completed due to over-estimated capacity and changes in policy (especially economic policy).

Economic theory and project design

During the 1980s and the first half of the 1990s, recommendations from research were taken into consideration to project annual campaigns (quotas and effort allocated to shrimp and industrial companies). This form of management, based on effort control, was able to keep effort at reasonable levels until 1996. This relationship between research and administration was recognised in the late 1980s as a good example for developing countries in a joint study sponsored by the World Bank¹¹.

The awareness of the fisheries administration of economic exploitation of fishing resources increased in the beginning of the 1990s, when the first bio-economic assessments were made of the shallow-water industrial Shrimp Fisheries of the Sofala Bank under a project sponsored by NORAD.

A bio-economic model allowing the simulation of alternative management measures was tried for the first time, and gave a much clearer insight to the levels of exploitation that could maximise resource rent. This was to represent an experiment with new methods of management to be shared with other fisheries, but unfortunately the approach was discontinued. With the integration of the fisheries sector into the Ministry of Agriculture, the central fisheries administration was disrupted and a lack of management awareness made the fisheries administration much more vulnerable to pressure groups.

The FMP 2010-2019 draft document is quite specific about the economic reference points for the fisheries sub-sectors (maximum social yield with respect to the artisanal sector, maximum economic yield with respect to the industrial sector, etc.). The Management Plan for the Shrimp Fisheries of Sofala Bank applies a similar approach.

Both the Fisheries Master Plan and the Management Plan for the Shrimp Fisheries of the Sofala Bank were devised within NORAD's Programme of Assistance to the Fisheries Sector. Assistance to both stock and bio-economic assessment studies is included in the new programme for 2010-2019.

Knowledge of the artisanal stocks needs to be increased. The Strategic Plan for Artisanal Fisheries Subsector (PESPA) states that monitoring of artisanal fisheries should be returned to co-management bodies (province, district and at the level of fishing centres) and the provincial and district fisheries administrations. The estimate of potential catches and assessment of artisanal fishing resources should be the responsibility of the National Fisheries Research Institute (IIP).

Outlook

The FMP 2010-2019 is the key for the future role of development aid. The new version of the plan provides a clear development strategy which will be the basis for negotiations with partner countries and agencies. As discussed, the FMP prioritises the increase of fish supply and the improvement of living conditions in the communities dependent on artisanal fisheries. In essence, this is to be achieved through increased catches and value added activities, control of industrial activity (where other fleets can be shown to provide greater socio-economic gains), increased access to shrimp by-catch by the artisanal sector and development of the aquaculture industry.

In summary, it is hoped that the industrial and semi-industrial fisheries will generate rent for use by government in social and economic development to reduce poverty, as well as providing a greater contribution to the country's balance of payments. Table 3 presents a SWOT analysis of fisheries in Mozambique.

11 The World Bank. 1992. A Study of International Fisheries Research. UNDP; EC; FAO.

Table 3: SWOT analysis of the fisheries sector

Analysis of fisheries sector	Aid needs
Strengths <ul style="list-style-type: none"> • Existence of a political body dedicated to fisheries • A new Fisheries Master Plan in place for 2010 • Adequate fishing legislation and positive attitude to foreign investment • Co-management committees created in the coastal area and 19 years experience • On-going decentralisation of the public administration • Experienced institutions and staff dedicated to the promotion of artisanal fisheries • Infrastructure and services available to fleets • A legal framework being defined 	<ul style="list-style-type: none"> • Continued support to infrastructure and local and national management institutions
Weaknesses <ul style="list-style-type: none"> • Weak planning system with limited statistics • Management system inefficient and not well co-ordinated • No surveillance capacity at sea and air owned by Mozambique • Lack of information on the fisheries at local levels • Weak regional co-operation in the Indian Ocean • Great dependence on aid funds • Illegal fishing practices and illegal gear in the artisanal fisheries • Artisanal fishermen's organisations not consolidated • Limited coverage of the marketing network • High value resources are already fully exploited or recovering 	<ul style="list-style-type: none"> • Greater national and international collaboration • Consolidation of local institutions and capacity
Opportunities <ul style="list-style-type: none"> • Some underexploited stocks (e.g. tuna and deepwater species) • Decentralisation process is ongoing • Co-operation with NGOs • Favourable legal framework • Electricity and communications available in many areas • Dynamism of informal operators • Demand for fisheries produce in the national and regional markets • Potential to increase aquaculture activities (sea and inland) 	<ul style="list-style-type: none"> • Exploration of alternative stocks and markets • Investment in private sector and research institutions
Threats <ul style="list-style-type: none"> • Outcomes from development aid not sustained due to high cost (surveillance) • Lack of co-ordination with marine conservation areas • Environmental degradation • Integrated approach to artisanal fisheries requires a high level of co-ordination with other sectors • Scarcity of development partners on the ground • Slow and insufficient disbursements of funds from government and donors • HIV, natural disasters • Low purchase power of consumers of artisanal fisheries produce • Instability of global fish and oil prices 	<ul style="list-style-type: none"> • Greater economic and food security through sustainable exports

Summary

Fisheries provide about 3% of the national GDP and the majority of this is generated by high value demersal fish and crustaceans caught by the industrial sub-sector. Fishing provides a vital socio-economic role for artisanal fishing communities, which land about 91% of the total marine catch. Despite its productivity, most species are already overexploited or fully exploited. Mozambique's legislative and policy framework for fisheries management has been developed in partnership with international donors, and fits well with national macro-economic policy, poverty reduction targets and the ongoing process of decentralisation. At least 20 of the 65 fisheries development projects since 2000 have focussed on the artisanal sub-sector, and overall there have been considerable achievements with respect to infrastructure and institutional development. The early adoption of bio-economic modelling has not been extended beyond the 1990s and there are serious failings with respect to control efforts through limited MCS and regional co-operation.

Key findings

1. 65 projects were active with a total value of funding of around US\$143 million (US\$129 million contributed by international donors).
2. 20 projects addressed artisanal fisheries, seven targeted small-scale aquaculture, four the rehabilitation of fishing port infrastructure, ten strengthened fish inspection services and quality control and 24 were capacity building projects supporting fisheries institutions.
3. Fisheries management now operates within a political and legislative framework that is broadly supportive of fisheries development for wealth generation and the improvement of livelihoods in the artisanal sector.
4. A national evaluation of past fisheries development support is broadly positive with regard to impact, especially in relation to capacity building (human capital and infrastructure), research and stock assessment.
5. Project failures have related to the inability to release funds on time, or a mismatch between the project and changing policy priorities and direction.
6. The FMP 2010-2019 articulates well with other national and donor country papers, and is explicit with regard to the economic function and potential of each sub-sector in terms of national development objectives.

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APPENDIX 4: FISHERIES AID IN UGANDA¹²

Abstract

Although fish production provides an important contribution to the country's export earnings, total exports have declined in recent years due to lower catches of Nile perch through overfishing. Development assistance has been provided for over 50 projects to support the improved management and productivity of fisheries over the last 30 years. Uganda has drawn on the support of at least 17 development partners, but overall aid to the sector represents only 6% of development aid to agriculture. Development projects tend to be short-lived, and tend to suffer from delayed release of funds and post-project support. However, three projects have attempted to address fisheries management capacity and explore effort control.

Introduction

Since 1976, there have been at least 48 fisheries projects in Uganda, with a further ten at regional level, most of which were on Lake Victoria. Several of these projects also included Uganda and the Democratic Republic of Congo on lakes Albert and Edward and supported aquaculture within the region. The focus of the projects has ranged from capacity building within government, to supporting the implementation of co-management and the promotion of aquaculture. Many projects were, however, of relatively short duration and not many have been consolidated, thereby reducing the long-term sustainability of impacts. **Table 1** provides a summary of the projects since 1997 and their areas of focus.

¹² This paper is a summary of: Nunan, F. & Tumwebaze R. 2010. African Fisheries Development Aid, Country Case Study No. 4 – Uganda. (In World Bank. 2010. Political Economy of Fisheries Reform: Lessons and Applications for Development Assistance. World Bank Project No. 7150204. Output No. 6.)

Table 1: Fisheries projects since 1997

Name of project	Years	Donor	Main themes
The Lake Victoria Research Project Phase II	1997-2002	European Union	Building research capacity; resource monitoring; socio-economic studies
Lake Victoria Environmental Management Project Phases I & II	1997-2005 2009-2016	World Bank, GEF, Swedish Government	Ecosystem management; fisheries management; capacity building; establishment of LVFO
Integrated Lake Management (with focus on lakes George and Kyoga)	1999-2004	UK DFID	Fisheries co-management; support to fisheries policy and planning at national level
Small-scale fish farming for food security and income generation	1999-2004	UK DFID	Small-scale fish farming
Uganda Egypt Aquatic Weed Control Project	1999-2010	Egypt	Aquatic weed control
The Socio-economics of the Nile Perch for Lake Victoria	2001-2005	NORAD via IUCN	Investigating socio-economic impacts on Nile perch
Fisheries Development Project	2002-2010	AfDB	Infrastructure at landing sites and markets; aquaculture; capacity building
Fish laboratory	2002-2005	ICEIDA	Quality assurance through development and equipping of a laboratory at DFR headquarters; training
Assistance to fish farmers in eastern Uganda	2003	FAO	Aquaculture
Implementation of Fisheries Management Plan for Lake Victoria	2003-2010	European Union	Co-management; compliance; resource monitoring; infrastructure; capacity building
Lakes Edward and Albert Fisheries (LEAF) Pilot Project	2004-2009	AfDB	Co-management, feasibility studies
Construction of Wakawaka fish landing site	2005-2006	China	Infrastructure
FISH Project	2005-2008	USAID	Capacity building in fishing farming technologies, cage farming
Policy analysis, advocacy and rights awareness project	2005-2008	DFID	Policy advocacy by Uganda Fish and Fisheries Conservation Association
Integrating BOMOSA cage fish farming systems in reservoirs, ponds and temporary water bodies in eastern Africa	2006-2009	European Union	Aquaculture
Aquaculture development strategy	2007	FAO	Aquaculture
EAC/AMREF Lake Victoria Partnership Programme	2007-2010	SIDA	HIV/AIDS in mobile communities; fisheries component co-ordinated by the Lake Victoria Fisheries Organisation (LVFO)

Table 1: Fisheries projects since 1997 (continued)

Name of project	Years	Donor	Main themes
Fisheries and HIV/AIDS in Africa: Investing in Sustainable Solutions	2007-2010	SIDA and Norway via FAO and WorldFish Center	Piloting assistance to people living with HIV/AIDS in fishing communities and prevention initiatives.
RPOA-Capacity Project	2008-2009	FAO, Norway	Management of fishing capacity on Lake Victoria
Support to updating and harmonising of Uganda's existing fisheries legislation	2009	FAO	Update legislation
Support to Quality Assurance for Fish Marketing Project	2009-2010	ICEIDA	Quality assurance (capture and aquaculture), infrastructure
Uganda Agricultural Technology Demonstration Center	2009-2013	China	Infrastructure, aquaculture research and development

In terms of geographical coverage, Lake Victoria has received more project support than the other lakes in Uganda which are also important fisheries for the national and local economies. There have been a number of projects providing support to the government in terms of policy development and legislation, and six of the 22 projects were related to supporting the promotion of aquaculture, with another project supporting the development of an aquaculture strategy. Four of the projects were concerned with fisheries management and two projects supported research on Lake Victoria. At least five projects included support for the development of policy and legislation, and two small projects tackling HIV/AIDS in the fisheries communities are ongoing.

Fisheries sector aid by donor

At least 17 donors have supported projects within the fisheries sector since 1976, with the European Union, World Bank and China providing the most consistent support and the largest financial support over this period.

The World Bank has supported fisheries within Uganda, largely through the Lake Victoria Environmental Management Project (LVEMP), the first phase of which ran from 1997 to 2005. The EU has supported fisheries in Uganda since 1984, when they provided fishing inputs and infrastructure through the Artisanal Fisheries Rehabilitation Project. The EU continues to provide support to Lake Victoria to improve the conditions under which Nile perch is caught, transported and processed on its way to international markets, of which the EU is a main destination.

The UK Department for International Development (DFID) provided support to the sector from the 1990s and into the

mid-2000s through small-scale aquaculture development projects and through the Integrated Lake Management Project (ILMP). A relatively recent entrant into development co-operation within the fisheries sector is the Icelandic International Development Agency (ICEIDA) which has supported literacy and quality assurance projects in fishing communities since 2002.

The AfDB supports the largest single project in Uganda, providing support for infrastructure at landing sites and markets and to aquaculture. Sweden has provided limited support to fisheries within Uganda through the regional Lake Victoria initiative.

The donors currently supporting fisheries in Uganda are:

1. ICEIDA
2. World Bank (project yet to be approved by parliament)
3. EU (regional project on Lake Victoria)
4. FAO
5. China
6. African Development Bank

The macro-economic context for the fisheries sector

The fisheries sector within Uganda is believed to contribute around 2% to the national GDP (MAAIF, 2004). It is considered an important sector in terms of employment and contribution to national income. The National Fisheries Policy (2004a) and Provisional Fisheries Strategic Sector Plan (FSSP) (2004b) were developed in coherence with the overarching vision, policy and planning documents of Uganda, which include the Vision 2025, the Poverty Eradication Action Plan (PEAP) and the Plan for the Modernisation of Agriculture.

Uganda was one of the first countries to develop a Poverty Reduction Strategy Paper (PRSP) with the PEAP of 1997. The first versions of the PEAP did not place much emphasis on fisheries, but this changed dramatically in 2005 with a special section under the pillar Enhancing Production, Competitiveness and Incomes. Co-management is highlighted as the means to meet future challenges.

Uganda is supported by the World Bank through the Uganda Joint Assistance Strategy (UJAS), supported by eight development partners: the AfDB, Austria, Germany, the Netherlands, Norway, Sweden, the UK Department for International Development and the World Bank. The UJAS was developed in parallel with the PEAP.

Fisheries receive little mention in the UJAS, with reference to fisheries made only in terms of the need to increase exports, including non-traditional exports such as fish. The current European Union Country Strategy Paper and National Indicative Programme runs from 2008 to 2013. With respect to fisheries, the EU supports the sector through its regional programme which supports the Lake Victoria fisheries through the implementation of a Fisheries Management Plan which was due to be completed in 2010.

Fisheries performance in Uganda

Table 2 provides a summary of the performance of the fisheries sector in Uganda in 2008.

Table 2: Summary of fisheries performance (2008)

Feature	Uganda
Fisheries production	<p>Inland capture: 430,000 tonnes Aquaculture: 50,000 tonnes Total: 480,000 tonnes First sale value: US\$720 million Capture fisheries output: declining Capture fisheries growth rate: -12.4% in 2007/08 Aquaculture output: increasing Aquaculture growth rate: 166%</p>
Fishing fleets	<p>27,800 boats in 2008 of which 21,836 were on Lake Victoria (5,156 with outboard engines, 23.6%) (Source: 2008 Frame Survey for Lake Victoria)</p>
Livelihood and employment	<p>Direct primary employment Capture fisheries: 350,000 Aquaculture: 50,000 Total: 400,000</p> <p>Secondary employment: 1.2 million With dependents: 2 million Fishers: 43,000</p>
State of fisheries resources	<p>Nile perch: Overexploited stocks Tilapia: Fluctuating on Lake Victoria and overexploited on other lakes Mukene: Fluctuating in lakes Kyoga and Albert, underexploited in Lake Victoria (Source: DFR field reports and LVFO Acoustic Surveys for Lake Victoria)</p>
Fish utilisation and trade	<p>260,000 (54% of catch) used for internal consumption, food; 220,000 (48% of catch) used for regional and international exports EU is a net importer of fish (since 1990); Exports to international markets US\$115 million Informal exports to regional markets US\$33 million (14% of informally traded goods) (UBOS & BOU 2007) Total exports: US\$148 million</p>

Table 2: Summary of fisheries performance (2008) (continued)

Feature	Uganda
Supply and consumption	Per capita fish consumption: 8.7 kg
Policy and management	Key issues: <ul style="list-style-type: none"> • Decline in fish catches • Decline in fish exports • Increase in use of illegal fishing gears and methods • Over fishing • Increase in catching of immature fish

Fisheries policies and plans

The current National Fisheries Policy (NFP) was developed in 2004 and was guided by Uganda's Vision 2025 and broad policy frameworks, including the National Environmental Action Plan and the PEAP.

The objectives of the NFP are set out as:

- Securing the long-term future of the fisheries sector to ensure that it contributes in a sustainable manner to the national economy;
- Protecting the biological diversity of fisheries and the life support system that defines major fisheries assets;
- Improving livelihoods and alleviating poverty in fishing communities, taking into account the special needs of women, youth and other disadvantaged groups;
- Co-operating with neighbouring states on the management of shared water bodies.

Decentralisation and participation are central to the policy.

Both the NFP and the provisional Fisheries Sector Strategic Plan (FSSP) reflect the government of Uganda's poverty reduction priorities and its efforts to increase the contribution of fisheries to the national economy and to economic growth. The two documents also reflect appropriately the contribution made by capture fisheries.

Key fisheries aid projects 1997-2009

The Lake Victoria Environmental Management Project (LVEMP) was a five year regional project aimed at the rehabilitation of the Lake Victoria ecosystem for the sustainable benefit of the people who live in the catchment area. The total cost of the project was US\$77.58 million. The project objectives were to 1) maximise the sustainable benefits to riparian communities by using resources within the basin to generate food, employment and income; and 2) conserve biodiversity and genetic resources for the benefit of the riparian communities and the global community.

The goals of LVEMP were fully compatible with those of

the regional governments and the Global Environment Facility. The project contributed to improved capacity within government, and went some way towards building and implementing a co-management approach to fisheries on Lake Victoria.

The ILMP (1999-2004), supported by DFID, had a strong poverty and livelihoods focus, reflecting the priorities of both DFID and Uganda's PEAP. The project supported the development of a new Fisheries Policy, draft Fisheries Sector Strategic Plan and Statutory Instrument for the Formation and Operation of Beach Management Units. The project piloted integrated management, building on a co-management approach to fisheries on Lake George and Lake Kyoga. A participatory approach to licensing was developed and used on Lake George, where there is closed access and a limited number of boat licences available.

Uganda, Tanzania and Kenya received €29.9 million from the EU for the implementation of an Integrated Fisheries Management Plan (IFMP, 2003-2010). The purpose of the intervention is to assist the three riparian countries constituting the Lake Victoria Fisheries Organization (LVFO) to implement fisheries management measures in line with the approved Fisheries Management Plan (FMP) and the LVFO Strategic Vision 1999-2015. The IFMP supported the partner states in developing legislation, implementing fisheries co-management and harmonising the approach to compliance and monitoring.

Several smaller projects provided support to the aquaculture sub-sector, quality assurance and marketing and to health programmes in fishing communities.

Project performance

The Implementation Completion Report (ICR) of LVEMP in Uganda (World Bank, 2006) rates the overall outputs and outcomes as moderately satisfactory, with fisheries management rated as marginally satisfactory and fisheries research as marginally unsatisfactory due to insufficient analysis of data and identification of policy implications. The ICR notes the new knowledge gained through LVEMP in

respect to co-management, but is critical of the government of Uganda for substantially, and repeatedly, delaying the disbursement of funds. The report is also critical of the government for not putting a fish levy trust into operation, which could have strengthened financial sustainability of fisheries, and for rescinding a ban on taking undersized fish.

The End of Project Review of the Integrated Lake Management Project acknowledged the “outstanding achievements of the ILMP” (Coutts and Heck, 2004, p. 2) in terms of informing policies, building institutions and facilitating processes for fisheries management. The policies, legislation and strategies developed with support from the ILMP are still in place and are instructive; however performance at lake-wide level has been particularly poor and mixed with Beach Management Unit (BMU) performance. The project supported the formation of two lake-wide management organisations on lakes George and Kyoga. While both organisations still exist in name, they have done little in practice and rarely meet. Financial constraints have been the main challenge, and in 2005 graduated tax removed a major source of local government revenue. Lack of sustainable financing and political resolve placed major constraints on building on project successes. It should also be noted that the five-year period of donor support may not have been sufficient to build sustainable institutions and to change attitudes and practice.

A similar theme is highlighted in the Mid-Term Review of the IFMP, which demands that co-management is treated as an overarching theme, rather than a project activity, and that implementation would extend beyond the lifetime of the project. The review also urges that more economic research be undertaken to determine the optimal net economic benefits of fishery and the implementation of the plan.

A recurring theme in the project evaluations is concern over delayed disbursement of counterpart funding by the government of Uganda. Several projects have been severely delayed as a result.

Economic theory and project design

At least three of the fisheries development projects in Uganda have involved some element which addresses the issues of over-exploitation and capturing resource rent. In addition, work on supporting the government of Uganda in developing a National Fisheries Policy and the provisional FSSP, and in implementing co-management, has strengthened the capacity of the sector to undertake to address these economic issues.

LVEMP supported Kenya, Tanzania and Uganda to develop proposals for a Fish Levy Trust Fund, designed to extract resource rent from the Nile perch fishery through exports. The levy has been introduced in Tanzania where it has enabled increased recruitment of local staff and strengthened monitoring, control and surveillance. Unfortunately, there is no Fish Levy in place in Uganda.

The ILMP supported a review of the boat licensing system at Lake George and ways to include the BMUs in effort control.

The review recommended a doubling of the number of licences, but this has not resulted in improved effort control and a reduction in illegal activity. ILMP also reviewed the role of informal “tenderers” in extracting revenues from the fishery sector and of the need to reinvest some of this rent in fisheries management.

From 2006 to 2008, the FAO supported the LVFO in developing a Regional Plan of Action (RPOA) for the Management of Fishing Capacity in Lake Victoria. The RPOA contains recommendations to limit fishing effort on Nile perch to the Frame Survey 2006 levels. The government of Uganda is committed to addressing overfishing, as demonstrated in the 2009 National Budget Framework paper, but all three regional partner states are more concerned with the high levels of illegal fishing, which is having a destructive impact on Nile perch stocks, rather than with overcapacity. Progress in addressing overcapacity has, therefore, been limited, but the measures to do so are outlined in the RPOA and associated implementation plan. It is possible that a lack of funds to enable progress in this area is preventing action.

Both the ILMP and IFMP have expressed the need to work with new and existing institutions to build in financial sustainability.

Outlook

The outlook for the fisheries sector must be considered within an environment in which increasing amounts of donor funding is provided through general and sector budget support. This increases the need for the sector to promote its priorities through the National Development Plan, although projects are likely to remain a vehicle for support in at least the medium-term.

There is patently a lot of concern about declining fish stocks in Uganda, and the government seems determined to address this through increased surveillance and enforcement, restocking and support to aquaculture. These priorities do not, however, fully reflect the objectives and contents of the National Fisheries Policy or build on project-supported experience on the ground, such as strengthening the implementation of co-management at the community, government and private sector levels. Project experience and lessons have not been fully recognised and built on by the government, and inadequate government funding for the sector has been a major challenge in seeing ongoing impacts from project support.

The nature of fisheries also presents a challenge to the agriculture sector in which it is located within government. The question remains whether its location within the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) leads to a technical emphasis on aquaculture and restocking, rather than natural resource management approaches such as co-management.

Table 3 presents a SWOT analysis of the fisheries sector in Uganda, highlighting the need for more support in the areas of increasing compliance, particularly through

co-management approaches, strengthening policy and legislation, capacity building throughout the sector, support for developing greater financial sustainability of management (including management of the BMUs and the DFR laboratory,

and support to develop and implement a National Plan of Action for Managing Fishing Capacity on Lake Victoria, in line with the RPOA-Capacity. Options for the management of fishing capacity on the other lakes should also be explored.

Table 3: SWOT analysis of the fisheries sector

Analysis of fisheries sector	Aid needs
Strengths <ul style="list-style-type: none"> • Processing power (17 fish processing factories) for value addition • Research institutions • Stable political environment • Institutions to ensure quality and safety • Political goodwill • National Fisheries Policy, FSSP and SIS 	<ul style="list-style-type: none"> • Support to strengthening of institutions (training, infrastructure, equipment) Institutions and processes in place for co-management, but more support is needed in terms of capacity building and financing
Weaknesses <ul style="list-style-type: none"> • Existing fisheries law not adequate to address current challenges • Inadequate funding • Low compliance with fisheries regulations • Corruption • High post-harvest losses for small sundried fish • Inadequate infrastructure for fish handling • Increase of weeds in small lakes 	<ul style="list-style-type: none"> • Support for the review of policy and legislation • Sustainable funding mechanisms to be developed • Increased understanding needed as to why illegalities are rife and an appropriate response to be developed • Infrastructure to ensure quality and safety of fish • Control of water hyacinth
Opportunities <ul style="list-style-type: none"> • Fresh water in five major lakes, rivers, dams, 160 minor lakes • Market for fish (local, regional and international) • Human resources • Co-management policy in place and implementation started 	<ul style="list-style-type: none"> • Support to strategies to increase fish production to meet the high demand • Management of fishing capacity • Support for the strengthening of fisheries co-management
Threats <ul style="list-style-type: none"> • Poverty • High population growth, increased demand for small fish • Increased use of illegal fishing gears and methods • Over-exploitation • Increase in catching of immature fish • Potential pollution from oil exploitation 	<ul style="list-style-type: none"> • Support to rebuilding exploited fish stocks • Alternative livelihoods • Controlled access • Strengthening of enforcement system

There is scope for much more support to the sector to build on progress within capture fisheries and aquaculture.

The current major proposals for fisheries include LVFO seeking support for the implementation of the revised Fisheries Management Plan, as the EU support ended in 2010. The proposal was identified by the LVFO Executive Committee, which consists of the directors of the departments of fisheries and fisheries research institutes. It is expected that the second phase of the LVEMP will go ahead, although

the Ugandan Parliament has yet to approve the project. The project was formulated following implementation of the first phase through a bridging phase in which major stakeholder groups were consulted and studies carried out. A proposal to support strategies to increase fish production in Uganda and a follow-up phase to the AfDB-funded Fisheries Development Project are being developed by the DFR.

The National Fisheries Policy is still relevant and important for Uganda, while the Development Strategic and Investment

Plan (DSIP) (2009/10-2013/14) also provides a framework for fisheries policy. The National Budget Framework Paper (2009/10-2013/14) identifies the fourth priority area within agriculture as the over-exploitation of fish stocks. In 2009/10, it states that the priority will be on increased inspection and surveillance and the promotion of aquaculture. In the medium term, priorities are listed as implementing institutional reforms, scaling up implementation of fisheries policies and strategy, including investment in aquaculture and restocking of depleted fish stocks.

In terms of outputs that were planned for 2009/10, the paper commits the government to a “regulated licensing framework developed to control overcapacity on the fishery resource”, suggesting that an National Plan of Action (NPOA) capacity will be developed and therefore a plan set out for managing capacity. Regulation and control remain key pillars of the response to over-exploitation. Monitoring the performance of co-management structures is also mentioned in the paper. Policies are envisaged to continue to encourage increased fish production through aquaculture, stock enhancement programmes and improved management measures on the lakes, and to strengthen initiatives to address concerns of consumers, such as eco-labelling.

There is certainly scope for much more support to the sector to build on progress within capture fisheries and aquaculture and strengthen the contribution fisheries makes to livelihoods, local and national economies and food security within Uganda.

Summary

The fisheries sector is of high importance for the economy of the landlocked country of Uganda. Over the last 10 years, fish has taken a strong position in the country's export earnings, with a dramatic increase since 1991 from 4,751 tonnes to 31,681 tonnes in 2005 exported to the international market. Exports have, however, subsequently reduced due to lower catches of Nile perch, as a result of the use of illegal fishing gears/methods and the catching of immature fish.

Despite this, regional trade remains important and aquaculture fish production is on the increase. Development assistance has been provided to Uganda to support the improved management and productivity of fisheries for at least the last 30 years, particularly in response to the opportunities that have arisen from the international export of Nile perch.

Key findings

1. Over 50 fisheries projects have been implemented in Uganda over the last 30 years, and have supported policy development, administration, capacity building, infrastructure and the promotion of aquaculture.
2. Of the 22 projects since 1997, seven were related to aquaculture and eight to capture fisheries, including

infrastructure. Two projects were concerned with policy directly and at least three were related to policy development. More support was provided to Lake Victoria than to other lakes in Uganda, reflecting the importance of the fisheries of Lake Victoria to the economy.

3. At least 17 donors supported the fisheries sector between 1976 and 2009, although the European Union and the World Bank have been the most consistent in their support. The Icelandic International Development Agency and the AfDB have become important development partners since 2000.
4. The fisheries sector only received approximately 0.0014% of all donor support in the 2009/10 financial year, compared to the 6% that went to agriculture as a whole.
5. Evaluations of projects identify positive outcomes, but highlight concerns about long-term sustainability and areas of poor performance, for example delays in procurement and release of counterpart funding by the government of Uganda. Low levels of funding to the sector by government, including funding to local government, and the short duration of donor support, were factors limiting sustainability and impact.
6. The inability to develop sustainable financing mechanisms within the sector, despite the potential to do so, has further limited the long-term sustainability of management and development approaches and initiatives.
7. Three projects within the last ten years have included efforts to address fisheries management challenges informed by economic analysis, including reviews of taxation, revision of a licensing system and the development of a Regional Plan of Action on Managing Fishing Capacity on Lake Victoria (RPOA-capacity).

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APPENDIX 5: WORKSHOP ON AFRICAN FISHERIES DEVELOPMENT AID

The workshop was held at the Novotel Hotel in Accra, Ghana on 22 and 23 June 2010.

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